

## NEW GENERA AND SPECIES OF MUSCOID FLIES.

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In the following descriptions the position of hind crossvein is stated with reference to its relative distance from the small crossvein and the cubitus as nearer to one or the other, or in the middle between them.

The holotypes of all the new species described are in the United States National Museum, excepting only those of *Trochiloglossa tropica*, *Myothyriopsis bivittata*, and *Neoerigone cinerea*, which are in the American Museum of Natural History; while paratypes of the last two are in the National Museum.

The forms are arranged systematically under tribes, to conform with the arrangement adopted in synoptic tables of muscoid genera which it is hoped may be published within the year.

### Tribe MUSCININI.

#### NEOMUSCINA, new genus.

*Genotype*.—*Neomuscina cavicola*, new species.

Differs from *Muscina* as follows: Clypeus strongly dished. Arista much longer than antennae, thinly plumose. Female frontalia without convergent pair of bristles in front of ocelli. Cheeks not as wide as epistoma. Only one preacrostichal bristle. Scutellum sub-pointed behind. Basal segment of abdomen well shortened, the anal segment little longer than preceding segment. Third segment with a marginal row of erect bristles.

#### NEOMUSCINA CAVICOLA, new species.

Length, 7 mm. Numerous specimens of both sexes, but largely males, from the Santa Catalina, Chiricahua, Graham, and Pinal Mountains, and the East Verde River, all Arizona, 3,500 to 5,500 feet. (C. H. T. Townsend); and females from Las Vegas Hot Springs, New Mexico (H. S. Barber). The males especially congregate in quantity during the day in caverns and under overhanging rocks in the canyons, often entering the tent at night.

Pale fulvous to straw-color. Head silvery. Frontalia and antennae smoky rufofulvous. Palpi fulvous. Mesoscutum and pleura blackish, silvery-cinereous pollinose; four blackish thoracic vittae. Scutellum and abdomen fulvous; the posterior half of abdomen tinged with brownish. Interrupted median vitta of blackish-brown on abdominal segments two or three; faintly visible on anal segment. Legs pale fulvous. Wings and tegulae glassy.

*Type*.—Cat. No. 22227, U.S.N.M., from East Verde River, Arizona.

Tribe MUSCINI.

EUPHORMIA, new genus.

*Genotype*.—*Musca regina* Meigen.

It has been demonstrated by Villeneuve<sup>1</sup> that *regina* Robineau-Desvoidy (not Meigen), genotype of *Phormia* Robineau-Desvoidy, is *azurea* Fallen. Thus the name *Phormia* takes the place of *Philornis* Meinert (1889), syn. *Protocalliphora* Hough (1899); while *regina* Meigen, which is generically distinct from *azurea* Fallen, will take the name *Euphormia*.

BUFOLUCILIA, new genus.

*Genotype*.—*Lucilia bufonivora* Moniez, 1876.<sup>2</sup>

Differs from *Lucilia* as follows: Form distinctly narrower. Head not conspicuously flattened in either sex, Epistoma long, wide, strongly warped, but in line with the warp of clypeus. Facial carina not showing between bases of antennae. Facialia not ciliate half way. Third antennal joint two and one-half times second, Arista long-plumose about two-thirds way. Female front equilateral, rather over one-fourth head width; that of male narrowed in front of ocelli to about width of ocellar triangle. Cheeks nearly one-third eye length. Third vein bristled nearly to small crossvein. Apical cell widely open well before tip, the apical crossvein straight. One or two strong erect median marginal pairs on second segment, strong erect marginal row on third, anal segment covered with erect bristles which are shorter in female.

*Lucilia silvarum* Meigen also belongs in this genus.

The maggots described by Mr. L. G. Guthrie,<sup>3</sup> and determined by Brauer as *Calliphora*, are quite certainly this genus.

Tribe STEPHANOSTOMATINI.

CHLOROSARCOPHAGA, new genus.

*Genotype*.—*Chlorosarcophaga cochliomyia*, new species.

Clypeus considerably sunken but not deep. Epistoma very short, full width, warped. Facialia set with short setae over halfway.

<sup>1</sup> Wien, Ent. Zeit., 1911.

<sup>2</sup> Bull. Dep. Nord Lille, vol. 8, p. 25; and also vol. 9, 1878.

<sup>3</sup> Ent. Month. Mag. vol. 28, p. 10.

Proboscis short, palpi club-shaped, subcompressed. Third antennal joint about three and one-half times second. Arista thinly long-plumose about two-thirds way. Frontals diverging one below base of antennae. Two proclinate fronto-orbitals in female. Ocellars present. Parafacialia irregularly set with several faint hairs down middle. Cheeks over one-fifth eye length. Three sternopleurals and postsuturals; two postintraalars; one preacrostichal and post-acrostichal; three lateral scutellars, but no apical. Third vein bristled halfway to small crossvein; others bare. Apical cell widely open some distance before tip. Hind crossvein nearer to cubitus, which bears a wrinkle. No median marginals on first two segments; marginal row on third and anal segments. First hypopygial tergite of female entire.

**CHLOROSARCOPHAGA COCHLIOMYIA, new species.**

Length, 6.5 mm. One female, Upper Chagres River, Canal Zone, Panama, October 9, 1917, 548 (Harold Morrison).

Dull metallic green, thinly pollinose. Face, front and occipital orbits golden; frontalia, antennae and palpi black. Mesoscutum brassy-silvery pollinose, leaving three broad dark vittae like those of *Cochliomyia*. Scutellum and abdomen thinly marmorate with silvery. Hypopygium rufous. Legs black, femora greenish. Wings faintly smoky-yellowish. Tegulae glassy-whitish.

*Type*.—Cat. No. 22086, U.S.N.M.

**PETROSARCOPHAGA, new genus.**

*Genotype*.—*Petrosarcophaga arizonica*, new species.

Clypeus rather elongate, about twice as long as wide. Epistoma elongate, narrow, somewhat warped. Facialia bristled halfway. Proboscis short, palpi club-shaped and bowed. Third antennal joint about three and one-half times second. Arista long-plumose about two-thirds way. Eyes bare. Frontals diverging one or two below base of antennae. No proclinate fronto-orbitals in male. Ocellars present. Parafacialia about as wide as clypeus, set with a few scattered setae; a row of bristly hairs next eye. Cheeks three-fifths eye length. No preacrostichals; one postacrostichal; two postintraalars and lateral scutellars; three sternopleurals; four postsuturals, the two anterior ones short. A moderately short erect decussate apical pair of scutellars in male, none in female. Third vein bristled over halfway to small crossvein, others bare. Apical cell open well before tip. Cubitus two-fifths the wing breadth from hind margin. Posterior crossvein nearer to cubitus. Male tibiae all lacking long hair. No median marginals on first two segments, median marginal pair on third, marginal row on anal segment. First hypopygial tergite of female showing a carinate seam or fold on median line, and excised in a vertical slit set with bristles.

## PETROSARCOPHAGA ARIZONICA, new species.

Length, 12 to 13 mm. Numerous specimens of both sexes, Sabino Basin, Santa Catalina Mountains, Arizona, about 4,000 feet, September 18 to 30, 1918, on rock surfaces of canyon beds (C. H. T. Townsend).

Blackish, ashy-white pollinose. Apical portion of anal segment, hypopygium of both sexes and palpi rufous. Head silvery-white, frontalia and antennae blackish. Thoracic pollen whitish. Abdomen tessellate with more ashy pollen. Legs blackish, tibiae more or less brownish. Tegulae white.

*Type*.—Cat. No. 22087, U.S.N.M.

## Tribe TEPHROMYIINI.

## TEPHROMYIOPSIS, new genus.

*Genotype*.—*Megerlea rufocaudata* Bigot, 1881.<sup>1</sup>

Facial characters practically same as in *Tephromyia*. Epistoma narrowed from clypeus. Arista long plumose. Apical cell short-petiolate. Abdominal macrochaetae marginal.

## Tribe MILTOGRAMMINI.

## OPSIDIOPSIS, new genus.

*Genotype*.—*Opsidiopsis oblata*, new species.

Differs from *Opsidia* as follows: Much narrower in form, sub-equilateral viewed from above. Front not very prominent; face of female narrower below than front. Frontalia in middle fully three times as wide as one parafrontal. A proclinate-divaricate pair of ocellars only. Parafacialia sparsely setose, little over half as wide below as above. Cheeks of female about one-fifth eye length. Two sternopleurals; three postintraalars and postsuturals; one or two pre-acrostichals and postacrostichals; a short discal pair of scutellars. Last section of fifth vein over half preceding section. Abdomen oblong; no median marginals on first segment, median marginal pair on second and third, marginal row on anal; the macrochaetae short.

## OPSIDIOPSIS OBLATA, new species.

Length, 5.5 mm. One male, Wild Horse Canyon, Animas Mountains, New Mexico, 5,000 feet, July 21, 1917, on tender mesquite foliage (C. H. T. Townsend).

Black. Head silvery, the pollen covering frontalia less thickly. Palpi blackish, slightly rufous basally. Thorax and scutellum thinly silvery; four thoracic vittae. Abdomen shining black, the forward half of last three segments silvery; the silvery fasciae becoming

<sup>1</sup> Ann. Soc. Ent. France, ser. 6, vol. 8, p. 269; Brauer, Sitz. Akad. Wiss., Math. Nat. Cl., vol. 107, pp. 514-15.

bluish, thinner, and indefinite on their posterior borders in varying lights. Wings clear. Tegulae white.

*Type*.—Cat. No. 22090, U.S.N.M.

Tribe MICROCHAETININI.

HYPENOMYIA, new genus.

*Genotype*.—*Hypenomyia petiolata*, new species.

Clypeus narrow, a little sunken. Epistoma narrow, elongate, warped gradually forward from clypeal plane. Facialia bare. Two strong decussate pairs of vibrissae, the lower pair stronger and near oral margin. Proboscis about head height; palpi slender. Third antennal joint one and one-half times second. Arista short-plumose. Eyes bare. Frontals stopping at base of antennae. No proclinate fronto-orbitals in male. Ocellars present. Parafacialia wider than clypeus, short-setose. Cheeks one-half eye length. Three to five, normally four sternopleurals; three postintraalar, postsuturals, and postacrostichals; two preacrostichals and lateral scutellars. A long decussate apical scutellar pair. Costal spine extremely long. Third vein bristled only at base, others bare. Cubitus near middle of wing breadth, with long and strong stump, the apical crossvein strongly sinuate. Apical cell petiolate, ending far before tip, petiole as long as small crossvein or longer and about in line with third vein. Hind crossvein not far from middle or considerably nearer to cubitus. Median discals on intermediate segments. Male claws very long.

HYPENOMYIA PETIOLATA, new species.

Length, 8 to 9 mm. Two females, East Verde River, Arizona, 4,200 feet, October 3, 1917 (C. H. T. Townsend); and both sexes, Los Angeles County, California (Coll. Coquillet).

Blackish, thinly cinereous pollinose. Head rather thickly silvery; frontalia, antennae and palpi brown. Thorax showing four more or less distinct dark vittae. Hind borders of last three abdominal segments brown in increasing width posteriorly, the anal segment being half brown. Tegulae watery-white. Wings nearly clear; narrowly brown at base of third vein, and on small, apical and hind crossveins.

*Type*.—Cat. No. 22210, U.S.N.M.

Tribe MYIOPHASIINI.

MEGAEULOEWIA, new genus.

*Genotype*.—*Megaeuloewia morinioides*, new species.

Vibrissal axis equal to antennal axis, about five-sixths of head height. Facial profile little over three-fifths of frontal. Clypeus little sunken, bent in middle in profile, the lower part warped forward

at 45°. Epistoma narrowed from clypeus, elongate, and in plane of lower part of clypeus; the oral margin and vibrissal angles prominent in profile. Facialia bare, much bowed. Vibrissae very strongly decussate. Proboscis nearly head height; palpi nearly twice as long as antennae and considerably swollen distally. Third antennal joint one and one-fourth times second. Arista nearly one and one-half times as long as antennae; swollen only at base, pubescent. Eyes thinly hairy. Female vertex one-third head width. Three to four proclinate fronto-orbitals in female. Parafacialia wider than clypeus, setose in three irregular rows. Cheeks nearly two-thirds eye length. Five to six sternopleurals, four strong; three postsuturals; two postintraalars; preacrostichals and postacrostichals present. Third vein bristled only at base; others bare. Apical cell widely open well before tip. Hind crossvein much nearer to cubitus. Middle metatarsi nearly as long as following joints together. No median marginals on first segment, but two pairs on second segment, marginal row on last two segments; median discal pair on third segment.

**MEGAEULOEWIA MORINIOIDES, new species.**

Length, 8 mm. One female, Rio Vaca, Pecos National Forest, New Mexico, 8,500 feet, August 27, 1916 (C. H. T. Townsend).

Shining jet black. Head very thinly silvery, varying to blackish in changing lights. Frontalia light brown. Face and cheek grooves brownish-rufous; antennae more rufous. Palpi fuscous, paler distally. Mesoscutum very faintly pollinose; the vittae obsolete. Abdomen not pollinose. Wings clear, faintly yellowish costobasally. Tegulae nearly white.

*Type*.—Cat. No. 22218, U.S.N.M.

**Tribe MORINIINI.**

**STEVENIOPSIS, new genus.**

*Genotype*.—*Steniosopsis sinuata*, new species.

General Moriniine characters. Form very narrow. Head of Paramacronychia, but epistoma rather wide and arista short. Eyes bare. Arista long-pubescent or short-plumose. Parafacialia nearly as wide as clypeus; setose in three rows, the three to five lowest bristles of outermost row strong. Two preacrostichals and lateral scutellars; three postintraalars, postsuturals, and postacrostichals; four or five sternopleurals; rather long divaricate apical scutellar pair. Costal spine very strong. Third vein bristled nearly or quite one-third way to small crossvein, others bare. Apical cell long-petiolate, ending far before tip, the petiole about twice as long as small crossvein. Hind crossvein a little nearer to cubitus, latter half way between the front and hind wing margins. Apical crossvein sinuate. Abdomen cylindroconical. Median marginal pair on first two

segments; median discal pair on intermediate segments; median row on last two, but that on anal weak; two strong discal rows rather irregular on anal.

*STEVENIOPSIS SINUATA*, new species.

Length, 8 mm. One male, Manzanares Creek, Pecos National Forest, New Mexico, 7,500 feet, August 30, 1916 (C. H. T. Townsend).

Brown to blackish, very thinly cinereous pollinose. Palpi, antennae, and frontalia black. Head black, thinly pollinose, more thickly pollinose on sides of face and front. Thorax rather thinly pollinose, leaving four narrow black vittae, the inner pair merged with blackish area between them. Abdomen submarmorate with cinereous pollen, hind margins of segments broadly brownish pollinose. Wings nearly clear, veins dark brown. Tegulae whitish.

*Type*.—Cat. No. 22255, U.S.N.M.

*OPELOUSIA*, new genus.

*Genotype*.—*Opelousia obscura*, new species.

Clypeus nearly flush. Epistoma short, not warped. Facialia bare. Proboscis very short; palpi short and rather stout. Third antennal joint about two and one-half times second in male. Arista long-pubescent halfway on upper side only. Eyes bare. Male vertex about one-sixth head width. Frontals stopping at base of antennae. Ocellars present. Parafacialia bare, equilateral. Cheeks over one-fourth eye length. Two sternopleurals, postintraalar, and postacrostichals; three postsuturals; one lateral scutellar; no preacrostichals; short erect decussate apical scutellar pair. Costal spine long, doubled. Third vein with one long bristle and some minute ones at base; others bare. Apical cell narrowly open to nearly closed in tip. Hind crossvein about in middle or nearer to small crossvein. Male claws as long as last tarsal joint. No median marginal on first segment; median marginal pair and incomplete marginal row on second; marginal row on last two segments; discal row on anal.

*OPELOUSIA OBSCURA*, new species.

Length, 4.5 to 5.5 mm. Three males, Opelousas, Louisiana, May, 1897; one male, Fargo, North Dakota.

Brownish, cinereous pollinose. Palpi fulvous. Frontalia and antennae brownish; base of latter obscurely fulvous. Face, cheeks, and sides of front ashy-silvery; occiput cinereous. Thorax subshining, very thinly pollinose, more thickly on humeri; vittae indistinct; a pair more or less visible before suture. Abdomen more thickly cinereous, subshining, leaving an obscure brown median vitta and brownish hind margins to segments. Femora reddish-brown, tibiae fulvous, tarsi dark. Wings clear. Tegulae glassy-whitish.

*Type*.—Cat. No. 22249, U.S.N.M., from Opelousas, Louisiana

## Tribe MELANOMYINI.

## PHASIOPHYTO, new genus.

*Genotype*.—*Phasiophyto fumifera*, new species.

General Melanomyine characters. Facialia about half as wide as parafacialia. Arista rather thickly short-plumose. Eyes practically bare. Frontals stopping at base of antennae. Parafacialia wide; inner half bare, outer half thickly set with bristles. Cheeks over one-fourth eye length. One lateral scutellar; two sternopleurals, postintralar, preacrostichals, and postacrostichals; three postsuturals; long decussate apical scutellar pair. Third vein bristled only at base, others bare. Apical cell nearly closed in tip. Hind crossvein nearer to small crossvein. No median marginals on first segment, but a pair on second, marginal row on last two segments.

## PHASIOPHYTO FUMIFERA, new species.

Length, 5 mm. One male, Rio Charape, Jaen Province, Peru, 4,500 feet, September 13, 1911 (C. H. T. Townsend).

Soft blackish-brown. Frontalia and bare parts of face with testaceous or lighter tinge. No distinct thoracic vittae. Abdomen largely brownish-golden pollinose; the bases of last three segments silvery, widening laterally. Wings fuscous on costa. Tegulae fuscous.

*Type*.—Cat. No. 22253, U.S.N.M.

## Tribe ORMINI.

## ORMIA BREVICORNIS, new species.

Length, 7.5 mm. One female, Texas (Belfrage).

Differs from *punctata* Robineau-Desvoidy as follows: Third antennal joint no longer than second. Front almost equal to eye width. Parafacialia wider. Vibrissae weak and indistinct. Cheek grooves reaching half way up face. Facial plate narrowed on lower half. Cheeks nearly two-fifths eye length.

The first-stage maggot has the cephalic spine-clusters, but the spines are arranged in a longitudinal series; in *punctata* they are arranged in a transverse series.

*Type*.—Cat. No. 22268, U.S.N.M.

## ORMIA DOMINICANA, new species.

Length, 6 mm. Three females, San Francisco Mountains, Santo Domingo, September, 1905 (A. Busck).

Differs from *punctata* Robineau-Desvoidy in the face widening evenly from front, the inner border of eyes thus straight in front view, the parafacialia thus noticeably widening above.

The first-stage maggot has one large talon or spine on each side of head, instead of a cluster.

*Type*.—Cat. No. 22269, U.S.N.M.



## Tribe CALIRRHINI.

## PUNAMYOCERA, new genus.

*Genotype.*—*Punamyocera oroyensis*, new species.

Differs from *Paramyocera* as follows: Form rather stout, only a little narrowed. Lower profile of head very long, approximating head height. Vibrissal axis fully five-sixths of head height or more. Epistoma almost as long as clypeus, strongly warped. Palpi long and slender. Parafacialia bare, as wide as long. Cheeks fully four-fifths eye length in female. Three sternopleurals, postintraalar, postsuturals, preacrostichals, and postacrostichals; two lateral scutellars; moderately long decussate apical scutellar pair. No median marginals on first segment; median marginal pair on second; median discal pair on intermediate segments; marginal row on last two segments; discal row on anal.

## PUNAMYOCERA OROYENSIS, new species.

Length, 10 mm. One female, Oroya, Peru, 12,000 feet, May 7, 1914 (C. H. T. Townsend).

Brownish, cinereous pollinose. Antennae rufous; arista and over distal half of third joint blackish. Palpi fulvous. Frontalia brown. Cheek grooves reddish-brown. Rest of head thinly silvery, appearing dense in varying light, the occipital area cinereous. Thorax and scutellum tawny-silvery; with three blackish vittae, a dull line each side of middle one. Abdomen ashy pollinose, with heavy rather indefinite dark brown median vitta, the hind corners of first three segments shading darker. Femora and tibiae subrufous, tarsi blackish. Wings nearly clear. Tegulae tawny-whitish.

*Type.*—Cat. No. 22232, U.S.N.M.

## STURMIODEXIA, new genus.

*Genotype.*—*Sturmiodexia rubescens*, new species.

General Calirrhine characters. Facial carina wide, high, separating the antennae. Epistoma long, distinctly narrowed. Haustellum about three-fifths head height. Palpi long and subfiliform. Arista long-plumose to tip. Eyes bare. Ocellars strong. Parafacialia as wide as clypeus, bare. Cheeks over half eye length. One postintraalar; one to three, usually two, postacrostichals; two preacrostichals; three sternopleurals, postsuturals, and lateral scutellars; strong decussate apical scutellar pair. Third vein bristled only at base; others bare. Apical cell widely open quite well before tip. Hind crossvein nearer to cubitus. Male claws very long. No median marginals on first two segments, marginal row on last two, discal row on anal.

## STURMIODEXIA RUBESCENS, new species.

Length, 9.5 to 10 mm. Four males, Yahuarmayo, Rio Inambari, Peru, 1,700 feet, February 9, 1910 (C. H. T. Townsend).

Brown to brownish-rufous, cinereous pollinose. Antennae and palpi light brownish-fulvous. Head with yellowish tinge to the pollen. Frontalia brown. Thorax and scutellum brown, silvery pollinose with slight brassy tinge; four black thoracic vittae, inner pair narrower and shorter, outer not interrupted. Abdomen brownish-rufous, last three segments changeably pollinose, with tawny tinge to pollen which shows golden to cupreous shades in varying light. Legs brown. Wings smoky costobasally and along veins. Tegulae lightly yellowish-smoky.

*Type*.—Cat. No. 22233, U.S.N.M.

## LEPTODEXIA, new genus.

*Genotype*.—*Leptodexia gracilis*, new species.

General Calirrhoinae characters. Facial carina nearly obsolete. Epistoma short, wide, strongly warped. Proboscis about one and one-half times head height. Palpi slender, hardly as long as third antennal joint, thickened some at tip. Third antennal joint about three times second. Arista thinly long-plumose to tip. Ocellars present, weaker in female. Parafacilia bare. Two sternopleurals and lateral scutellars; three postsuturals; no preacrostichals; one postintraalar; one very weak postacrostichal; weak divergent apical scutellar pair. Wings long, narrow, equilateral. Apical cell open almost in tip. Legs long; tarsi elongate in both sexes; male claws long. Median marginal pair on first segment in male but not in female, on intermediate segments in both sexes and tending to marginal row on third; marginal row on anal.

## LEPTODEXIA GRACILIS, new species.

Length, 5 to 6 mm. One male and one female, Huascaray Ridge, Jaen Province, Peru, 7,000 feet, September 21 and 22, 1911 (C. H. T. Townsend).

Brown to blackish, cinereous to pale golden pollinose. Palpi fulvous, more or less fuscous apically. Antennae black. Frontalia soft brown with coppery reflection. Rest of head silvery, with faint golden tinge in places. Thorax and abdomen rather thickly pollinose, with decided golden tinge; leaving three thoracic vittae, the middle one over twice as wide as the outer ones and reaching to tip of scutellum, the outer ones broadly interrupted at suture and sharply pointed behind; four large blackish triangles on abdomen, one on each segment. Wings and tegulae faintly smoky-yellowish.

*Type*.—Cat. No. 22257, U.S.N.M.

**HESPERODINERA, new genus.**

*Genotype*.—*Hesperodinera cinerea*, new species.

Differs from *Dinera* as follows: Not so narrowed in form. Facial carina obliquely lowering and extending to epistoma. Haustellum about two-thirds head height. Palpi nearly twice as long as antennae. Antennae inserted well below eye middle. Female vertex about one-third head width. Female frontalia well over half as wide as one Parafacial. Two proclinate ocellar pairs. Parafacialia a little wider than clypeus, well setose. Cheeks three-fifths eye length. Three postintraalars. Third vein bristled only at base. Apical cell petiolate well before tip, petiole nearly or about as long as small crossvein. No stump at cubitus. Abdomen rather broad ovate. Strong median marginal pair on first two segments, median discal pair on intermediate segments, strong marginal row on third, strong discal and rather strong submarginal rows and weak marginal and anterior rows on anal segment.

**HESPERODINERA CINEREA, new species.**

Length, 7 mm. One female, Harvey's Ranch, Pecos National Forest, New Mexico, 10,000 feet, August 22, 1916 (C. H. T. Townsend).

Blackish, thickly yellowish-cinereous pollinose. Cheek grooves reddish-brown in oblique view. Frontalia light brown. Antennae soft black, second joint pale on distal edge. Palpi fuscous. Five blackish thoracic vittae, moderately distinct, the inner pair narrow and approximated to the median vitta. A pair of indefinitely subtriangular dark spots showing in oblique view on second and third abdominal segments. Legs blackish. Wings clear. Tegulae yellowish-white.

This species was determined by Coquillett as *Myocera rava* Wulp, but that species has the apical cell open.

*Type*.—Cat. No. 22215, U.S.N.M.

**Tribe THERESINI.****SCHISTOSTEPHANA, new genus.**

*Genotype*.—*Schistostephana aurifrons*, new species.

Differs from *Gymnobasis* as follows: Form somewhat more narrowed. Clypeus equilateral, fully twice as long as wide. Epistoma strongly warped, subnasute, at 45 degrees from profile of carina. Two verticals in male, the outer one very short. Male frontalia very wide and deeply arcuate at anterior end. Many proclinate-divergent pairs of ocellars, thickly placed and all same length, ordinarily from 8 to 12 pairs evenly divaricate like hair parted at the crown of the head.

## SCHISTOSTEPHANA AURIFRONS, new species.

Length, 12 mm. Two males, Rio Charape, Peru, 4,500 feet, September 15, 1911 (C. H. T. Townsend).

Blackish, cinereous pollinose. Face golden. Front dull silvery. Frontalia deep soft brown. Antennae blackish, first two joints dark rufous. Palpi light rufous. Thorax and scutellum silvery, former with three heavy complete equal black vittae, disk of scutellum black. Abdomen blackish, more than posterior half of anal segment rufous; dark parts thinly to thickly silvery, intensity changing with point of view. Wings clear. Tegulae pale glassy-fuscous.

*Type*.—Cat. No. 22231, U.S.N.M.

## OPSOTHERESIA, new genus.

*Genotype*.—*Opsotheresia obesa*, new species.

General Theresiine characters. Strong, high facial carina. Epistoma moderately long, warped some from profile of carina. Facialia bare. Haustellum fully two-thirds head height. Palpi rather long and slender, a little thickened at extreme tip. Third antennal joint little over twice second. Arista short-plumose. Eyes bare. Male vertex less than one-fifth head width, the front narrowing therefrom slightly. Ocellars strong. Parafacialia wider than clypeus, equilateral, bare. Cheeks nearly half eye length. Three postintraalar and lateral scutellars; four sternopleurals and postsuturals; one preacrostichal and postacrostichal; long decussate apical scutellar pair. Third vein bristled only at base, others bare. Apical cell open well before tip. Hind crossvein nearer to cubitus. Male claws long. No median marginals on first two segments, marginal row on last two. Hind tibiae thickly short-ciliate.

## OPSOTHERESIA OBESA, new species.

Length, 13 mm. One male, Plummers Island, Maryland, June 15, 1908 (W. L. McAtee).

Blackish or dark brown, more or less shining. Palpi fulvous. Antennae reddish-orange, second joint tinged with brown. Frontalia soft dark brown. Rest of head silvery, the cheek grooves showing brownish-red in direct view. Thorax black, thinly silvery; leaving five black vittae, the outer heavy, the median not so wide, these three extending to base of scutellum; the other vittae are narrow, approximated to the median one, and give out a little behind suture. Scutellum testaceous, the extreme base blackish. Abdomen brown, largely shaded with rufous especially posteriorly, thinly silvery pollinose like the scutellum. Wings clear. Tegulae white.

*Type*.—Cat. No. 22262, U.S.N.M.

## PTERINOPTERNA, new genus.

*Genotype*.—*Pterinopterna ciliata*, new species.

Clypeus considerably sunken, not twice as long as wide. Epistoma well warped. Facialia bare. Proboscis short; palpi clubshaped, reaching epistoma. Third antennal joint about twice second. Arista short, thinly long-plumose. Eyes thickly pilose. Frontals stopping at base of antennae. No proclinate fronto-orbitals in male. Ocellars present. Parafacialia wider than clypeus, thickly black-pilose on outer lower part. Cheeks over two-fifths eye length. Two postintraalar, preacrostichals and postacrostichals; three sternopleurals and lateral scutellars; four postsuturals. No apical scutellars. Third vein bristled only at base, others bare. Apical cell open some distance before tip. A very short stump at cubitus. Hind crossvein nearer to cubitus. Hind tibiae quite thickly and evenly ciliate with ordinary bristles; hind metatarsi plumose with fine hairs on each side, a double series of long hairs on outer edge and a single series of shorter hairs on inner edge. No median marginals on first segment, a short appressed pair of median marginals on second, a strong erect pair of median marginals on third, marginal row of erect on anal segment.

## PTERINOPTERNA CILIATA, new species.

Length, 10 mm. One male, Huascaray Ridge, Jaen Province, Peru, 7,000 feet, September 22, 1911 (C. H. T. Townsend).

Blackish, abdomen widely rufous on sides. Face, including parafacialia and anterior half or so of cheeks, bronze pollinose; rest of cheeks and occiput gray pollinose. Frontalia and parafacialia soft brownish-black. Antennae brown, third joint reddish at base. Pleura thinly silvery. Mesoscutum more thickly silvery; with five black vittae, of which the next to outer one on each side is narrow, subconfluent with the median vitta and gives out a little behind suture. The three main vittae are heavy, uninterrupted at suture, and narrowly edged with bronze pollen. Scutellum bronze pollinose in a discal triangle, more silvery laterally. Abdomen rufous; median depression of first segment, median vitta, hind border of third segment and most of anal segment dark brown to blackish; front borders of last three segments narrowly silvery, widening in oblique view on median line; median vitta and anal segment showing bronze to silvery pollen in oblique view. Legs black. Wings clear. Tegulae glassy-infusate.

*Type*.—Cat. No. 22228, U.S.N.M.

## Tribe TRICHODURINI.

## TRICHODUROPSIS GUIANENSIS, new species.

Five females, Bartica, British Guiana (Through C. W. Johnson).

Differs from *recta* Schiner as follows: Abdomen and wings colored as in *Trichodura anceps* Wiedemann. Thorax has the median light

golden vitta split anteriorly into three, the darker vittae and lateral marking being pale brown to brown and extending on scutellum, while the long stripes from humeri to scutellum are dark brown. First abdominal segment with median marginal pair. Size is same.

*Type*.—Cat. No. 22271, U.S.N.M.

Tribe CORDYLIGASTERINI.

EUTOROCCA, new genus.

*Genotype*.—*Eutorocca fasciata*, new species.

Clypeus considerably sunken. Epistoma arcuately cut out, in clypeal plane. Facialia short-ciliate one-third way. Proboscis short, palpi stout and flattened. Eyes bare, descending to vibrissal level. Male front narrower posteriorly than length of second antennal joint. Frontals stopping at base of antennae, continuing posteriorly to ocelli in male. No verticals nor proclinate fronto-orbitals in male. Ocellars very weak; ocellar triangle extremely small, atrophied. Parafacialia narrowed almost to a line below, bare. Cheeks hardly one-twelfth eye length in male. One preacrostichal and postacrostichal; two sternopleurals and postintraalar; three postsuturals and lateral scutellars; no apical scutellars. Third vein bristled about one-third way to small crossvein; others bare. Apical cell narrowly open a little before tip. Hind crossvein fully its length from cubitus. Male claws long. Abdomen about twice as long as thorax and narrower than latter. Median marginal pair on first segment; marginal row on last three segments; median discal pair on first three segments; and discal row on anal.

EUTOROCCA FASCIATA, new species.

Length, 8.5 mm. One male, Peradeniya, Ceylon, August 11, 1913 (A. Rutherford).

Dark brown, thinly pollinose. Frontalia, antennae (third joint missing) and palpi brown, the palpi slightly tinged with fulvous. Face and front silvery, shading to pale golden on latter in oblique view. Mesoscutum and scutellum dark metallic-green, faintly silvery in oblique view, more so in front of suture, with four black vittae; humeri and pleura more thickly silvery, latter with two shining brown spots. Abdomen shining dark brown, base of intermediate segments widely golden pollinose, basal half of anal segment silvery pollinose. Wings faintly smoky-yellowish. Tegulae yellowish glassy.

*Type*.—Cat. No. 22241, U.S.N.M.

Tribe MINTHOINI.

MICROMINTHO, new genus.

*Genotype*.—*Micromintho melania*, new species.

Clypeus a little depressed. Epistoma short, gently warped. Facialia bare. Proboscis short, palpi slender. Third antennal joint

about four times second. Arista nearly bare; basal joints short. Eyes bare. Frontals two below base of antennae. Two proclinate fronto-orbitals in male, the hind one short. Ocellars weak. Parafacialia very narrow, with row of four to five facio-orbitals. Cheeks little over one-fourth eye length. One or two short geno-orbitals. One preacrostichal and postacrostichal; two postintraalars and lateral scutellars; three sternopleurals and postsuturals. A long decusate apical pair of scutellars. Costal spine strong. First vein bristled halfway and again in middle of distal half; third bristled to small crossvein; others bare. Apical cell long-petiolate, ending little before tip; petiole as long as posterior crossvein; latter nearer to small crossvein. Last section of fifth vein rather over half of preceding section. No median marginals on first segment, median marginal pair on second; marginal row on third and anal segments. Male claws minute; the front tarsi distinctly swollen and compressed. Abdomen conical.

**MICROMINTHO MELANIA, new species.**

Length, 3.75 mm. One male, Globe Hills, Arizona, 3,300 feet, on foliage of *Thurberia*, September 10, 1917 (C. H. T. Townsend).

Shining black. Head silvery; face and cheeks more thickly so. Antennae, arista, and frontalia brown. Palpi fulvous. Parafrontalia, thorax and scutellum thinly silvery. Four black thoracic vittae. Narrow front borders of last three abdominal segments silvery-white. Wings clear. Tegulae watery-white.

*Type*.—Cat. No. 22089, U.S.N.M.

**METALLICOMINTHO, new genus.**

*Genotype*.—*Metallicomintho abdominalis*, new species.

Differs from *Micromintho* as follows: Vibrissal axis only a little less than antennal axis and about half head height. Third antennal joint narrower than second and about four times latter. Arista pubescent. Eyes indistinctly short-hairy. Female vertex not one-third head width. Female frontalia not as wide as one parafrontal. Parafacialia considerably narrowed below, with four strong facio-orbitals down middle. Cheeks nearly one-third eye length. First vein bare on distal half. Middle metatarsi as long as following joints together. Female front tarsi plump, compressed, the claws minute. A row of strong erect discals on anal segment. Apical crossvein more oblique, nearly parallel with hind margin of wing. Abdomen depressed.

**METALLICOMINTHO ABDOMINALIS, new species.**

Length, 6 mm. One female, Castle Butte, Arizona, 5,200 feet, September 19, 1917 (C. H. T. Townsend).

Shining olive-black. Head thinly silvery; the parafrontalia mostly black, only the outer portions silvery. Frontalia soft dark brown.

Second antennal joint, narrow base of third and palpi rufo-fulvous. Thorax very faintly silvery above, much more so on pleura; three heavy silver-white vittae before suture. Scutellum and abdomen with strong olive shade and without pollen; the scutellum rather greenish and the abdomen rather tinged with cupreous or metallic bronze. Legs black, coxae silvery. Wings clear, yellowish along costa. Tegulae yellowish-white, somewhat glassy.

*Type*.—Cat. No. 22216, U.S.N.M.

Tribe ZELIINI.

PARAZELIA, new genus.

*Genotype*.—*Parazelia pulchra*, new species.

Clypeus considerably sunken, subequilateral, nearly three times as long as wide. Epistoma narrow, cut off short, warped. Facialia bare. Proboscis short; palpi long, stout, bowed. Third antennal joint about four times second; constricted basally and bulged on upper side distally. Arista long; moderately long-plumose. Eyes bare. Frontals stopping at base of antennae. No proclinate fronto-orbitals in male. Ocellars present. Parafacialia hardly as wide as the narrow clypeus, microsetose on inner half. Cheeks about two-fifths eye length. Three sternopleurals, postsuturals and lateral scutellars; two posttraalar, preacrostichals; one postacrostichal; no apical scutellars. Third vein bristled only at base, others bare. Apical cell widely open a little before tip. No median marginals on first segment, median marginal pair on second, marginal row on third and anal segments.

PARAZELIA PULCHIRA, new species.

Length, 7.5 mm. One male, Trinidad Rio, Panama, March 23, 1912 (A. Busck).

Brown to blackish. Cheek grooves light brown; frontalia dark brown. Palpi brown, tips pale. Antennae dark brown, shading lighter distally. Rest of head ashy pollinose with a brassy tinge. Mesoscutum thinly silvery to pale brassy pollinose, with four blackish vittae, the outer ones heavy. Scutellum blackish basally; pale brassy pollinose on distal half or so. Abdomen pale brassy pollinose on front half or more of last three segments, the pollinose bands increasing in width posteriorly and widening laterally, a median vitta of brown showing indistinctly. Legs brown. Wings faintly smoky, distinctly so on costa. Tegulae glassy, tinged with smoky-yellowish.

*Type*.—Cat. No. 22206, U.S.N.M.

MINTHOZELIA, new genus.

*Genotype*.—*Minthozelia montana*, new species.

Epistoma short, slightly warped. Facialia bare. Proboscis short; palpi slender, a little thickened at tip. Third antennal joint one and one-half times second. Arista long-plumose. Eyes bare. Frontals



stopping at base of antennae. Ocellars absent. Parafacialia bare, nearly as wide as clypeus. Cheeks less than one-third eye length. Three sternopleurals, postintraalar, postsuturals, preacrostichals, postacrostichals and lateral scutellars; no apical scutellars. Third vein bristled only at base; others bare. Apical cell narrowly open a little before tip. Hind crossvein nearer to cubitus. Median marginal pair on first two segments; marginal row on third and anal segments.

**MINTHOZELIA MONTANA**, new species.

Length, 5.5 mm. One female, Sixshooter Canyon, Pinal Mountains, Arizona, 5,000 feet., September 2, 1917 (C. H. T. Townsend).

Black, silvery-white pollinose. Frontalia soft brown. Antennae fulvous, tinged with fuscous. Palpi fulvous. Four indefinite changeable thoracic vittae. Anterior border of last three abdominal segments silvery-white, the rest shining black. Wings clear. Tegulae glassy-white.

*Type*.—Cat. No. 22204, U.S.N.M.

**OPSOZELIA**, new genus.

*Genotype*.—*Opsozelia discalis*, new species

Zelline characters in general. Clypeus slightly sunken; epistoma long and strongly warped. Haustellum fully half head height, corneous; palpi stout, nearly as long as antennae. Third antennal joint about four times second. Arista thickly long-plumose to tip, with two rows of cilia above. Eyes bare. Frontals thickly placed in male. Two strong ocellar pairs. Parafacialia hardly over half as wide as clypeus, equilateral, bare. Cheeks hardly one-third eye length. One postintraalar; two preacrostichals and postacrostichals; three sternopleurals, postsuturals and lateral scutellars; no apical scutellars. Third vein bristled about one-third way to small crossvein; others bare. Apical cell widely open well before tip. Cubitus near margin, with faint wrinkle. Hind crossvein nearer to cubitus. Male tarsi and claws long and stout. No median marginals on first segment, but a pair on second; three median discal pairs in file on each of intermediate segments; marginal row on last two segments; anal segment with submarginal and discal rows also. Fifth sternite of male large.

**OPSOZELIA DISCALIS**, new species.

Length, 13 mm. One male, Bartica, British Guiana, July 10, 1901 (through C. W. Johnson).

Brown to blackish; abdomen largely yellow. Antennae clear deep fulvous; the palpi nearly the same shade. Frontalia soft dark brown, shining in oblique view. Rest of head thickly ashy-silvery pollinose. Thorax and scutellum thickly ashy-silvery; with four

blackish vittae, the inner pair shorter. Abdomen pale yellow, heavy median vitta blackish; anal segment and irregular posterior half of third rufous; hind border of second pale smoky-rufous; anal segment thinly silvery pollinose, showing more densely on base and sides. Femora and tibiae tinged with rufous. Wings tinged with smoky-yellowish on costal half or so. Tegulae glassy.

*Type*.—Cat. No. 22237, U.S.N.M.

Tribe EUTHELAIRINI.

PARATHELAIIRA, new genus.

*Genotype*.—*Parathelaira panamensis*, new species.

Clypeus well sunken. Epistoma rather short, abruptly warped. Facialia bare. Proboscis very short; palpi long and slender. Third antennal joint two and one-half times second in male. Arista much longer than antennae, thin, bare. Eyes bare. Male vertex about one-seventh head width. One frontal below base of antennae. No proclinate fronto-orbitals in male. Ocellars very weak. Parafacialia narrow, bare. Cheeks little over one-sixth eye length. Two sternopleurals; three postintraalar, postsuturals, preacrostichals, postacrostichals, and lateral scutellars; no apical scutellars. Costal spine present. Third vein bristled only at base; others bare. Apical cell open a little before tip. Hind crossvein a little nearer cubitus. Male claws long. Median marginal pair on first two segments; median discal pair on intermediate segments, marginal row on last two segments; submarginal and two discal rows on anal segment.

PARATHELAIIRA PANAMENSIS, new species.

Length, 9.5 mm. One male, Porto Bello, Panama, February 25, 1911 (A. Busck).

Brownish, silvery pollinose. Palpi, basal half of antennae, parafacialia, anterior half of parafrontalia, and base of last three abdominal segments pale fulvous; these parts all silvery pollinose except palpi and antennae. Four dark thoracic vittae, the inner pair a little narrower. Wings faintly and evenly smoky-yellow. Tegulae glassy-whitish.

*Type*.—Cat. No. 22224, U.S.N.M.

LYDELLOTHELAIIRA, new genus.

*Genotype*.—*Lydellothelaira collaris*, new species.

Clypeus rather deeply sunken. Epistoma short; nearly in clypeal plane. Facialia strongly ciliate over halfway. Proboscis very short; palpi heavy, wide, short, bowed. Third antennal joint about three and one-half times second in male. Eyes bare. Male front well over one-fourth head width. Two frontals below base of antennae, but in straight line. Two proclinate fronto-orbitals in male. Ocellars

present. Parafacialia narrow, bare. Cheeks about one-fourth eye length. Two sternopleurals and preacrostichals; three postintraalars, postsuturals, postacrostichals, and lateral scutellars; a weak apical scutellar pair. Third vein bristled only at base; others bare. Apical cell widely open a little before tip. Hind crossvein a little nearer to cubitus. Male claws short. All four abdominal segments with marginal row.

**LYDELLOTHELAIRA COLLARIS**, new species.

Length, 7.5 mm.; of wing, 8 mm. One male, Casahuiri, Peru, 4,500 feet, February 4, 1910 (C. H. T. Townsend).

Brown to blackish. Parafacialia and most of parafrontalia pale yellowish pollinose; clypeus and facialia thinly silvery. Antennae blackish; first two joints brown. Frontalia light brown. Palpi brown. Thorax and scutellum soft dark brown; mesoscutal suture bordered in front by a narrow irregular silvery fascia confluent with silvery of humeri, and extending obliquely and broadly down on pleura. Abdomen subshining brown; last three segments with narrow anterior border of silvery to pale brassy pollen. Wings nearly clear. Tegulae whitish, narrowly edged with yellow.

*Type*.—Cat. No. 22219, U.S.N.M.

**THELAIROCHAETONA**, new genus.

*Genotype*.—*Thelairochaetona thrix*, new species.

Clypeus moderately sunken. Epistoma cut off; faintly warped. Facialia bare. Proboscis very short; palpi stout and bowed. Third antennal joint about four times second. Arista longer than antennae, thin, finely pubescent one-fourth way. Eyes bare. Female vertex one-fourth head width. Two frontals below base of antennae. Two strong proclinate fronto-orbitals in female. Ocellars present. Parafacialia narrow, bare. Cheeks hardly one-fifth eye length. Three sternopleurals, postintraalars, postsuturals, preacrostichals and lateral scutellars; two postacrostichals; short apical pair of scutellars. Costal spine present. First vein bristled nearly halfway; third bristled to small crossvein; others bare (one bristlet on fifth vein in one wing). Apical cell widely open considerably before tip. Hind crossvein nearer to cubitus. Median marginal pair on first two segments; median discal pair on second and third; marginal row on last two; and discal row on anal segment.

**THELAIROCHAETOMA THRIX**, new species.

Length, 9 mm. One female, Porto Bello, Panama, April 18, 1912 (A. Busck).

Blackish, cinereous pollinose. Palpi rufous. Pollen of parafrontalia with strong golden tinge. Antennae blackish. Frontalia soft

brown. Thorax and scutellum brassy-cinereous; leaving four black vittae, the outer ones interrupted. Basal half of last three abdominal segments thickly brassy-cinereous pollinose; the rest of abdomen shining brown. Legs dark brown to blackish. Wings lightly yellowish-smoky, especially on costa. Tegulae yellowish-white.

*Type*.—Cat. No. 22220, U.S.N.M.

Tribe URAMYINI.

ANAPORIA, new genus.

*Genotype*.—*Aporia limacodis* Townsend, 1892.<sup>1</sup>

Differs from *Paraporia* mainly in the clypeus being distinctly, though slightly sunken, the arista thickly short-pubescent halfway, the male abdomen conico-subcylindrical and truncate anally. The clypeus is quite flush in *Paraporia*, while the male abdomen is flattened and pointed anally. The ocellars are quite strong, at least in male, and there are two weak discal scutellar pairs. There are no well-developed median anterior macrochaetae on second segment.

PSEUDEUANTHA OCTOMACULATA, new species.

Length, 13 mm. One male, Huadquina, Peru, 5,000 feet, July 30, 1911 (Yale Peruvian Expedition).

Differs in coloration from *Paraporia quadrimaculata* as follows: All four of the abdominal segments with whitish lateral spots which are small and restricted. Wings conspicuously yellow across basal third; brown on outer two-thirds of costal portion. The grayish pollen has a yellowish or brassy tinge.

*Type*.—Cat. No. 22272, U.S.N.M.

MICROAPORIA, new genus.

*Genotype*.—*Microaporia elegans*, new species.

Near *Chaetonopsis*, with main characters as follows: Form very narrow. Arista long-pubescent, mostly on upper side. Eyes bare, pushed far forward below. Male front prominent, vertex nearly one-fourth head width. Ocellars very weak. Frontals stopping at base of antennae. Frontalia very wide. Parafacialia bare. Cheeks nearly one-third eye length. No postacrostichals; one preacrostichal and lateral scutellar; two sternopleurals and postintraalar; three postsuturals; medium decussate apical scutellar pair. Costal spine strong. Third vein with one strong bristle at base; others bare. Apical cell open a little before tip. Hind crossvein near middle. Male claws long. Abdomen narrow and elongate; widest on hind margin of first segment, gradually narrowing posteriorly. Median marginal pair on first segment, marginal row on last three segments; median discal pair on intermediate segments; discal row on anal.

<sup>1</sup> Psyche, vol. 6, p. 275.

## MICROAPORIA ELEGANS, new species.

Length, 4.5 mm. One male, Cuzco, Peru, February 21, 1910 (C. H. T. Townsend).

Dark brown or blackish, rather thinly silvery. Antennae and palpi black. Frontalia and cheek grooves soft blackish-brown. Rest of head thinly silvery, with blackish reflections in varying light. Thorax and scutellum thinly silvery; two very broad black vittae on thorax, reaching on sides of scutellum; similar wide vitta on pleura from wing root to lower humeral region, also extending back to halteres. Abdomen subshining dark brown, basal half of last three segments thinly silvery pollinose, changing to brassy in varying light. Legs brown. Wings clear. Tegulae whitish, somewhat fuscous on inner edge.

*Type*.—Cat. No. 22238, U. S. N. M.

## Tribe LESKIINI.

## TROCHILOGLOSSA, new genus.

*Genotype*.—*Trochiloglossa tropica*, new species.

Clypeus flush. Epistoma wide, strongly warped, nearly half as long as clypeus. Facialia bare. Haustellum about two and one-half times head height, nearly long enough to reach tip of abdomen; curved backward; palpi long, subcylindrical. Third antennal joint about one and one-half times second. Arista bare; basal joints short. Eyes bare. Frontals diverging one bristle at base of antennae. Two proclinate fronto-orbitals of female crowded nearly into frontal row. Ocellars present. Parafacialia narrow, bare. Cheeks not over one-fifth eye length. One postacrostichal; two postintraalars, preacrostichals and lateral scutellars; three sternopleurals and postsuturals. A weak divergent apical scutellar pair. Third vein bristled only at base, others bare. Apical cell narrow, open a little before tip. Posterior crossvein nearer to cubitus. No median marginals on first segment; median marginal pair on second; marginal row on third and anal segments.

## TROCHILOGLOSSA TROPICA, new species.

Length, 8 mm. One female, Chapada, Brazil (H. H. Smith).

Tawny flavous. Head and thorax silvery pollinose; scutellum and abdomen less thickly so. Pleura and posterior half of abdomen darker in ground color, cinereous pollinose. Frontalia, antennae, palpi and legs yellowish; the tarsi darker. Wings clear, with yellowish along the veins. Tegulae watery-white.

*Type*.—In American Museum of Natural History.

**BESKIOLESKIA, new genus.**

*Genotype*.—*Beskioleskia busckii*, new species.

Clypeus flush, long, narrow, bent in middle, the lower half warped forward. Epistoma short, full width. Facialia bare. Vibrissae distinct from the other bristles. Haustellum not as long as head height; palpi fully as long as antennae, bent in middle, distal half compressed and gently widened. Third antennal joint about five times second. Arista long-pubescent. Eyes bare. Frontals stopping at base of antennae. Two very short and weak proclinate fronto-orbitals in female. No ocellars, ocellar triangle atrophied, ocelli very small. Parafacialia bare. Checks not over one-fourth eye length. Two sternopleurals and postintraalars; three postsuturals, preacrostichals, postacrostichals and lateral scutellars; no apical scutellars. Third vein bristled to small crossvein; others bare. Apical cell open nearly in tip. Hind crossvein nearer to cubitus but distant. No median marginals on first two segments; marginal row on third and anal; and median discal pair on anal.

**BESKIOLESKIA BUSCKII, new species.**

Length, 5 to 6.25 mm. Two females, Cabima and Taboga Islands, Panama, May 23 and June 19, 1911 (A. Busck).

Pale luteous to pale fulvous. Third antennal joint smoky-rufous. Frontalia light golden. Mesoscutum bright golden pollinose, with four faint narrow smoky-yellow vittae. Abdomen subrufous on posterior half or so, including median vitta and posterior part of second segment; second and third segments with brown spot at posterior margin on median line. Tarsi appearing dark from the vestiture. Wings slightly smoky-yellowish; more yellowish on costa. Tegulae yellowish.

*Type*.—Cat. No. 22207, U.S.N.M.

**Tribe MYIOMINTHOINI.****UROCHAETONA, new genus.**

*Genotype*.—*Urochaetona longipes*, new species.

Differs from *Phyllophilopsis* as follows: Palpi not swollen in either sex. Arista moderately long-plumose to tip. Two sternopleurals and postintraalars; postacrostichals only hair like; preacrostichals short. Hind legs very elongate in male, especially the tarsi. Abdomen more elongate and more pointed behind. Strong erect median marginal pair on first abdominal segment.

**UROCHAETONA LONGIPES, new species.**

Length, 4.5 to 5.5 mm. One male and one female, Yahuarmayo, Rio Inambari, Peru, 1,700 feet, February 9 and 11, 1910, on foliage (C. H. T. Townsend).

Shining dark brown. Frontalia with fulvo-cupreous reflection in oblique view. Face, third antennal joint and sides of front silvery. Palpi fuscous. Thorax silvery; with three wide black vittae; the middle one more or less fulvous pollinose on median line before suture especially in male; the outer ones interrupted by a narrow silvery pollinose border on hind edge of prescutum. Scutellum and abdomen without pollen except the narrow thinly silvery bases of last three segments. Wings and tegulae moderately yellowish-fuscous; paler in female.

*Type*.—Cat. No. 22230, U.S.N.M.

URODEXIA SIAMENSIS, new species.

Length, 13 mm. to end of tail; tail, 5 mm. One male, Khow Sai Dow, 1,000 feet, Trong, Lower Siam, January to February, 1899 (W. L. Abbott).

Head silvery, shading to golden on sides of front. Palpi fuscous. Antennae black; third joint grayish. Frontalia dark brown. Pleura silvery; mesoscutum golden, with four narrow dark brown vittae; the outer ones widely interrupted at suture and abbreviated anteriorly, while behind suture they are connected by a broad dark brown fascia covering a little more than the anterior half of the postscutum. Scutellum dark brown except the golden tip, as though crossed by a similar dark fascia. Abdomen brown; the bases of intermediate segments broadly golden pollinose; anal segment silvery with the tail brown. Legs light brown. Wings and tegulae lightly smoky-yellow.

*Type*.—Cat. No. 22267, U.S.N.M.

PSEUDOCHAETONA, new genus.

*Genotype*.—*Pseudochaetona polita*, new species.

Head characters of *Pseudodexia*. Third antennal joint four or five times second. Arista longer than antennae, slender, thinly short-plumose to tip. Eyes bare. Frontals one or two weak below base of antennae. One vertical in male. Ocellars vestigial. Parafacialia very narrow, bare. Cheeks hardly one-eighth eye length. One preacrostichal, postacrostichal and lateral scutellar; two sternopleurals and postintraalar; three postsuturals; long decussate apical scutellar pair. Third vein bristled only at base; others bare. Apical cell open just before tip. Hind crossvein nearly in middle. Apical crossvein deeply bowed in. No median marginals on first segment, but a pair on second; marginal row on last two segments.

PSEUDOCHAETONA POLITA, new species.

Length, 6.5 mm. One female, Trinidad Rio, Panama, March 25, 1912 (A. Busck); one male, Yahuarmayo, Peru, February 10, 1910 (C. H. T. Townsend).

Palpi pale straw-color. Antennae pale fulvous; third joint in female largely fuscous. Frontalia brownish. Rest of head silvery, pale golden on parafrontalia. Pleura brown, with a broad oblique silvery fascia. Mesoscutum pale golden pollinose, the irregular forward half of postscutum shining dark brown. Scutellum shining brown, the tip golden pollinose. Abdomen shining dark brown or blackish; the base yellow as far as middle of second segment, but leaving a dark median vitta in male; base of third segment narrowly yellow on sides; bases of last three segments silvery to pale golden pollinose. Femora yellow; the tips and rest of legs darker. Wings nearly clear, faintly smoky-yellowish. Tegulae glassy, slightly tawny.

*Type*.—Cat. No. 22251. U.S.N.M., from Panama.

#### MINTHOMYIA, new genus.

*Genotype*.—*Minthomyia abdominalis*, new species.

Clypeus very shallow. Epistoma short, not warped. Facialia bare. Proboscis very short; palpi short and wide. Third antennal joint about three times second in male, widening somewhat apically. Arista a little longer than antennae, bare. Eyes bare. Male vertex about one-seventh head width. Two frontals below base of antennae. No proclinate fronto-orbitals in male. Parafacialia extremely narrow, bare. Cheeks hardly one-sixth eye length in male. One preacrostichal; two sternopleurals and postsuturals; three post-intraalar and lateral scutellars; no apical scutellars. Third vein bristled only at base; others bare. Apical cell open just before tip. Hind crossvein a little nearer to cubitus. Male tarsi and claws long. Median marginal pair on first two segments; marginal row on last two.

#### MINTHOMYIA ABDOMINALIS, new species.

Length, 6.5 mm. One male, Rio Charape, Jaen Province, Peru, 4,500 feet, September 12, 1911 (C. H. T. Townsend).

Blackish, abdomen yellowish. Head thinly silvery. Palpi fulvous. Articulation of antennae and base of arista tinged with fulvous. Frontalia and posterior half of parafrontalia brown. Disk of mesoscutum, humeri, and pleura thinly ashy, leaving two broad shining vittae and scutellum bare. Abdomen fulvous-yellow; the anal segment and posterior border of third brownish from the dried contents of abdomen. Wings lightly smoky, more deeply so on outer half of costa. Tegulae glassy-yellowish.

*Type*.—Cat. No. 22235, U. S. N. M.

#### TELOTHYRIOSOMA, new genus.

*Genotype*.—*Telothyriosoma tersa*, new species.

Clypeus a little sunken. Epistoma cut off, warped on edge. Facialia ciliate one-fourth way. Proboscis short, palpi rather club-shaped. Third antennal joint hardly three times second in male.



Arista faintly pubescent one-third way. Eyes thinly short-haired. Male vertex about one-seventh head width. Two frontals below base of antennae. No proclinate fronto-orbitals in male. No ocellars. Parafacialia very narrow, bare. Cheeks about one-eighth eye length. Two sternopleurals and postsuturals; three postintraalar, preacrostichals, postacrostichals, and lateral scutellars; very weak apical scutellar pair. Costal spine strong. Third vein bristled only at base; others bare. Apical cell narrowly open just before tip. Hind crossvein nearer to cubitus. Male hind tibiae strongly bowed, claws long. Median marginal pair on first two segments and marginal row on last two.

**TELOTHYRIOSOMA TERSA**, new species.

Length, 7.5 mm. One male, Cayuga, Guatemala, April, 1915 (William Schaus).

Palpi fulvous. Antennae wholly clear pale fulvo-rufous, including base of arista. Face thinly silvery; front brassy. Thorax and scutellum brassy with four dark vittae; inner pair narrow and linear. First two abdominal segments clear light yellow; narrow median vitta and last two segments, including posterior edge of second, largely due to dried contents of abdomen, brown; third segment thinly brassy, showing most on front edge; anal segment thickly brassy. Legs brown. Wings and tegulae moderately smoky.

*Type*.—Cat. No. 22234, U.S.N.M.

**MICROCHAETONA**, new genus.

*Genotype*.—*Microchaetona gracilis*, new species.

Differs from *Phyllophilopsis* as follows: Very slender. Only two sternopleurals and postintraalar. One strong vertical in male. Male abdomen not very much longer than thorax, in shape like the female of *Phyllophilopsis*. Male wings only about twice as long as thorax.

**MICROCHAETONA GRACILIS**, new species.

Length, 3 to 3.5 mm. Two males, Yahuar Mayo, Rio Inambari, Peru, 1,700 feet, February 12, 1910, on foliage (C. H. T. Townsend).

Dark brown to blackish. Frontalia with golden reflection in oblique view. Palpi pale yellowish to fuscous. Antennae blackish. Rest of head silvery. Thorax, scutellum, and abdomen shining brown; humeri and median vitta in front of suture silvery. Pleura faintly silvery. Legs pale brown, tarsi darker. Wings light smoky-yellow, pale on inner border and axilla. Tegulae glassy-fuscous.

*Type*.—Cat. No. 22236, U.S.N.M.

**OPSOLESKIA**, new genus.

*Genotype*.—*Opsoleskia flava*, new species.

Clypeus appreciably sunken. Epistoma wide, short, faintly warped. Facialia bare. Proboscis little over half head height; palpi

short and rather slender. Third antennal joint about three times second in male; rather narrow. Arista moderately long-pubescent halfway. Eyes bare. Male vertex hardly one-seventh head width. One frontal below base of antennae. No proclinate fronto-orbitals in male. No ocellars. Parafacialia very narrow, bare. Cheeks scarcely one-sixth eye length. Two sternopleurals, postsuturals, and postacrostichals; three postintraalars, preacrostichals, and lateral scutellars; no apical scutellars. Third vein bristled only at base, others bare. Apical cell open just before tip. Hind crossvein a little nearer to cubitus. Tarsi and claws long in male. Median marginal pair on first two segments, marginal row on last two.

*OPSOLESKIA FLAVA*, new species.

Length, 7 mm. One male, Bartica, British Guiana, June 4, 1901 (through C. W. Johnson).

Fulvous-yellow. Frontalia brown. Third antennal joint and arista tinged with fuscous. Palpi pale yellow. Rest of head silvery, shading to golden on front. Thorax rather thickly pale golden pollinose; four dark vittae, the inner pair narrow, the outer ones widely interrupted. Abdomen wholly light yellowish, appearing bare in direct view but showing thin pollen coat in oblique view. Legs fulvous. Wings slightly tinged with fuscous, more so on outer half. Tegulae glassy-yellowish.

*Type*.—Cat. No. 22240, U.S.N.M.

Tribe VORINI.

*OESTROPLAGIA*, new genus.

*Genotype*.—*Oestroplagia petiolata*, new species.

Clypeus only slightly depressed. Epistoma short, slightly warped. Facialia ciliate about or nearly halfway above vibrissae. Proboscis short; palpi club-shaped. Second antennal joint elongate; the third no longer than second. Arista short, bare, basal joints short. Eyes bare, the inner border sinuate in male. Frontals in three rows in male, descending four bristles below base of antennae. No proclinate fronto-orbitals in male. Ocellars present. Parafacialia bare. Cheeks one-fourth eye length. Several geno-orbitals. Four sternopleurals, postsuturals, and lateral scutellars; three postintraalars, preacrostichals, and postacrostichals. A weak suberect nondecussate apical pair of scutellars. Costal spine strong. Third vein bristled only at base; others bare. Apical cell petiolate far before tip; the petiole nearly twice as long as small crossvein. Cubitus nearly in middle of wing breadth, with strong stump. Posterior crossvein nearly its length from cubitus. No median marginals on first segment; median marginal pair on second; marginal row on third; discal row on anal with marginal and submarginal bristles.

## OESTROPLAGIA PETIOLATA, new species.

Length, 6 mm. One male, Sabino Basin, Santa Catalina Mountains, Arizona, 3,550 feet, October 12, 1918, on flowers of *Baccharis sarothroides* Gray (C. H. T. Townsend).

Black. Head very faintly grayish, frontalia brown; second antennal joint and base of third rufous; palpi fulvous. Body lead-gray pollinose; four black equal thoracic vittae; first abdominal segments, subobsolete median line, and irregular hind borders of last three segments black; nearly the posterior half of anal segment blackish. The black of intermediate segments changes with varying light, running forward on sides in oblique view. Legs black. Tegulae white. Wings clear; the veins black.

*Type*.—Cat. No. 22088, U.S.N.M.

## VIBRISOVORIA, new genus.

*Genotype*.—*Vibrissovoria petiolata*, new species.

Clypeus long, considerably sunken. Epistoma narrow, rather long, strongly warped. Facialia ciliate over halfway. Proboscis short; palpi long, stout, bowed. Second antennal joint long; third hardly twice second. Arista bare, short, thickened nearly to the sharp tip; second joint over half third. Eyes bare. Male frontals in two rows, three bristles below base of antennae. No proclinate fronto-orbitals in male. Ocellars present, perhaps reclinate (injured). Parafacialia wide, bare. Cheeks one-fourth eye length. Three sternopleurals, postintraalars, preacrostichals, postacrostichals, and lateral scutellars; four postsuturals. A very weak divaricate apical scutellar pair. Costal spine moderately long. Third vein bristled only at base; others bare. Apical cell petiolate, ending well before tip; petiole as long as small crossvein. Posterior crossvein in middle. Last section of fifth vein over one-third preceding. No median marginals on first segment; median marginal pair on second; marginal row on third and anal segments.

## VIBRISOVORIA PETIOLATA, new species.

Length, 8 mm. One male, Balboa Prado, Canal Zone, Panama, July 2, 1918, G 32d (H. F. Dietz).

Blackish, gray pollinose. Face and front silvery. Thorax silvery, leaving four equal black vittae, the two of each side convergent behind suture. Scutellum thinly silvery; more so on tip. Abdominal segments thinly silvery, except hind margins and median line. Anal segment mostly reddish; sides of second segment faintly reddish. Wings clear. Tegulae white.

*Type*.—Cat. No. 22085, U.S.N.M.

## Tribe MACQUARTIINI.

## MATUCANIA, new genus.

*Genotype*.—*Matucania mellisquama*, new species.

Clypeus gently sunken. Epistoma very short, not warped. Facialia ciliate less than one-third way. Proboscis very short; palpi stout, long, bowed. Third antennal joint about three times second in male. Arista longer than antennae, thin, bare. Eyes thickly very long-pilose. Male vertex not one-fourth head width. Frontals stopping near base of antennae. Ocellars present. Parafacialia bare. Cheeks about two-fifths eye length. Two preacrostichals and lateral scutellars; three sternopleurals, postintraalar, and postsuturals; two or three postacrostichals; rather long slender strongly decussate apical scutellar pair. Third vein bristled only at base; others bare. Apical cell open considerably before tip. Hind cross-vein nearer to cubitus. Male claws long; median marginal pair on first two segments; median discal pair on intermediate segments; marginal row on last two segments; discal row on anal.

## MATUCANIA MELLISQUAMA, new species.

Length, 7.5 to 8 mm. Two males, Matucana, Peru, 8,000 feet, January 30, 1913, and May 1, 1914 (C. H. T. Townsend).

Black, rather shining, with faint metallic bluish reflection, thinly silvery. Antennae black. Fontalia brown. Palpi fulvous. Rest of head silvery. Pollen thicker on front and lateral edges of thorax, and on pleura; four black vittae, the inner narrow, the outer blotch-like and ill-defined. Abdomen silvery on bases of segments laterally, the disks of first three segments showing triangular areas of rusty pollen in oblique view. Hind tibiae rather rufous or fulvous, the others less so. Wings faintly smoky-yellowish, more so costally. Tegulae honey-colored.

*Type*.—Cat. No. 22250, U.S.N.M.

## LEPTOMACQUARTIA, new genus.

*Genotype*.—*Leptomacquartia planifrons*, new species.

Clypeus flush. Epistoma very short, little warped. Facialia finely ciliate about halfway. Proboscis about two-thirds head height; palpi long, slender, crooked. Third antennal joint about twice second in male. Arista microscopically pubescent basally. Eyes nearly bare. Front of male much flattened, vertex not over one-tenth head width. One frontal below base of antennae. Ocellars present. Two sternopleurals, postintraalar and lateral scutellars; three postsuturals; one or two preacrostichals; postacrostichals at most very weak; short decussate apical scutellar pair. Third vein bristled only at base; others bare. Apical cell open a little

before tip. Hind crossvein nearer to cubitus. Male tarsi and claws long; median marginal pair on first segment, median marginal pair or marginal row on second; median discal pair on second; marginal row on last two segments; median discal pair or discal row on third; discal row on anal.

LEPTOMACQUARTIA PLANIFRONS, new species.

Length, 6.5 to 7 mm. Three males, Matucana, Peru, 8,000 feet, January 30 and August 16, 1913, on foliage (C. H. T. Townsend).

Head black, thinly silvery on face and sides of front. Antennae and palpi blackish; frontalia dark brown. Thorax black with faint metallic bluish tinge; silvery on humeri, pleura, and middle of prescutum; with four brown vittae, the outer heavy and confluent anteriorly with the inner. Abdomen blackish, faintly metallic greenish, thinly silvery laterally on bases of segments, the pollen extending across segments in oblique view. Legs black. Wings narrowly brown on costa. Tegulae whitish.

*Type*.—Cat. No. 22246, U.S.N.M.

Tribe HYALURGINI.

XANTHOCERA ATRA, new species.

Length, 4.5 mm. (abdomen arched). Two females, Alto Pass and Dubois, Illinois, May 7 and 21, 1917 (J. R. Malloch).

Differs from *clistoides* Townsend as follows: Abdomen wholly polished black, without sign of pollen. Thorax and scutellum shining black, but with faint indications of thin pollen coat in oblique view. Front a little wider, and clypeus not quite so depressed. No weak apical pair of scutellar bristles. Femora shining black to brown-black.

*Type*.—Cat. No. 22270, U.S.N.M.

Tribe LYDELLINI.

AUBAEANETIA, new genus.

*Genotype*.—*Aubaeanetia assimilis*, new species.

Clypeus moderately sunken. Epistoma cut off, not warped. Facialia ciliate at most about one-third way. Proboscis a little over half head height; palpi about as long as haustellum, a little widened at tip. Third joint of antennae in male about three times second and stout; in female twice second and not stout; in both submucronate. Arista short-pubescent. Three frontals below base of antennae. Two proclinate fronto-orbitals in both sexes. Ocellars strong. Parafacialia bare. Cheeks over one-fourth eye length. Two preacrostichals and postacrostichals; three sternopleurals, post-intraalar, postsuturals and lateral scutellars; very weak apical scutellars. Costal spine strong. Third vein bristled about one-

third way to small crossvein; others bare. Apical cell open considerably before tip. Hind crossvein a little nearer to cubitus. Male claws not as long as last tarsal joint. Abdomen subcylindrical. Median marginal pair on first two segments; median discal pair on intermediate segments; marginal row on last two; submarginal and discal rows on anal.

**AUBAEANETIA ASSIMILIS, new species.**

Length, 6.5 to 7 mm. One male and one female, Franconia, New Hampshire, July 21 and 27, 1915, on foliage in woods (C. H. T. Townsend).

Shining black, more or less silvery. Palpi fulvous, darker basally. Antennae blackish. Frontalia brown. Rest of head silvery, with blackish reflections in varying light; occiput ashy. Thorax and abdomen shining, with silvery pollen thinly spread on former and on bases of last three segments of latter. Four indistinct black vittae on thorax before suture. Wings clear. Tegulae whitish.

*Type*.—Cat. No. 22244, U.S.N.M.

**STOMATOLYDELLA, new genus.**

*Genotype*.—*Stomatolydella infernalis*, new species.

Clypeus moderately sunken, not twice as long as wide. Epistoma short, well warped. Facialia ciliate to lowest frontals. Proboscis hardly two-thirds head height. Palpi stout, bowed, rather short. Third antennal joint over three times second, narrow. Arista crooked, pubescent. Eyes pilose. Male vertex one-fourth head width, the front nearly equilateral on posterior half or so. Two frontals below base of antennae. Two proclinate fronto-orbitals in male. Ocellars absent. Parafacialia bare, scarcely one-third as wide as clypeus, narrowing below. Checks less than one-fifth eye length. Three sternopleurals, postintraalar, postsuturals, preacrostichals, postacrostichals, and lateral scutellars; a pair of scars indicates a small apical pair. Third vein bristled only at base, others bare. Apical cell narrowly open a little before tip. Hind crossvein nearer to cubitus. Middle and hind metatarsi as long as following joints together. Hind tibiae pectinate on basal half, the bristles on distal half shorter. Abdominal macrochaetae short and weak; median marginal pair on first two segments, marginal row on third longer than others, anal segment with weak bristles over disk.

**STOMATOLYDELLA INFERNALIS, new species.**

Length, 6 mm. One male, Hell Canyon, Manzano Mountains, New Mexico, 7,200 feet, September 19, 1916, on foliage of scrub-oak (C. H. T. Townsend).

Dark brown. Head brassy-cinereous. Frontalia light brown. Palpi fulvo-rufous. Humeri and pleura thinly gray pollinose. Mesonotum soft blackish, with faint traces of brownish pollen; vittae subobsolete, five showing in front of suture, of which the outer on each side is wide and blotch-like. Abdomen pale brassy pollinose on irregular forward half of last two segments and on second segment each side of median line anteriorly, the median vitta of dark brown distinct throughout. Wings clear. Tegulae nearly white.

*Type*.—Cat. No. 22217, U.S.N.M.

ANAMETOPOCHAETA, new genus.

*Genotype*.—*Anametopochaeta olindoides*, new species.

Clypeus moderately sunken. Epistoma rather short, faintly warped. Facialia bare. Proboscis short, palpi moderately stout. Third antennal joint nearly three and one-fourth times second. Arista longer than antennae, pubescent halfway on upper side. Eyes somewhat thinly short-hairy. Female vertex nearly one-fourth head width; front but little widened anteriorly. Frontals aborted, consisting of about five microscopic short fine hairs, one slightly below base of antennae. Proclinate fronto-orbitals also aborted, represented by two microscopic short hairs. Two strong reclinate fronto-orbitals, and one strong reclinate vertical. No ocellars. Parafacialia bare. Cheeks about one-fourth eye length. Two sternopleurals, preacrostichals, and postacrostichals; three postintraalar, postsuturals, and lateral scutellars; minute apical scutellar pair. Third vein bristled only at base, others bare. Apical cell very narrowly open a little before tip. Hind crossvein considerably nearer to cubitus. Tarsi long. Median marginal pair on first two segments; marginal row on last two segments; weak discal row on anal segment. Female without sharp piercer.

ANAMETOPOCHAETA OLINDOIDES, new species.

Length, 6.5 mm. One female, Chaquinayo, Peru, 2,500 feet, February 5, 1910, on foliage (C. H. T. Townsend).

The coloration almost exactly agrees with Desvoidy's description of *Olinda brasiliensis*,<sup>1</sup> only the tegulae are yellowish. The long arista and the apical crossvein bowed in preclude identification with that genus. The black parts are antennae, frontalia, four thoracic vittae, narrow base of scutellum, first abdominal segment, irregular posterior half of last three segments, and legs. A faint narrow brown median vitta shows on abdomen. Palpi pale fulvous; proboscis brownish. All the rest is quite deeply golden pollinose. Wings faintly yellowish-smoky across middle and less so apically.

*Type*.—Cat. No. 22225, U.S.N.M.

<sup>1</sup> Essai Sur les Uydaires, 1830, p. 116.

**URODEXODES, new genus.**

*Genotype*.—*Urodexodes charapensis*, new species.

Differs from *Paradexodes* as follows: Frontal profile about as long as facial. Proboscis about two-thirds head height. Third antennal joint about three times second, equilateral, subtruncate. Four or five frontals below base of antennae. No ocellars. Parafacialia in middle about one-fourth width of clypeus. Normally three postsuturals. No apical scutellars. Cubitus about one-fourth of wing breadth from hind margin. Anal segment of male as long as preceding segment; not caudate but tapered to a point, obliquely cut off below on posterior half in profile. Abdomen with short erect bristles in addition to the macrochaetae; only one strong median discal pair on intermediate segments.

**URODEXODES CHARAPENSIS, new species.**

Length, 9 to 10 mm. Two males, Rio Charape, Jaen Province, Peru, 4,500 feet, September 15 and 16, 1911 (C. H. T. Townsend).

Antennae, palpi and frontalia blackish; rest of head anteriorly quite thickly golden pollinose; the occiput ashy. Thorax and scutellum somewhat paler golden pollinose, former with four black vittae. Abdomen dark brown; last three segments pale golden pollinose, leaving an indistinctly defined and changeable triangular brown area on intermediate segments, and a brown reflection on disk of anal segment. Legs blackish. Wings faintly fuscous costally. Tegulae tawny, more or less glassy.

*Type*.—Cat. No. 22229, U.S.N.M.

**PHRYNOLYDELLA, new genus.**

*Genotype*.—*Phrynolydella polita*, new species.

Differs from *Lydella* as follows: Clypeus twice as long as wide or more. Facialia ciliate about halfway. Antennae inserted well above eye middle; third joint twice to three times second. Male frontalia no wider than one parafrontal in middle; those of female narrower than one parafrontal. Hind crossvein not far from cubitus. Male abdomen truncate posteriorly, not pointed; median discals not doubled. Intermediate segments lacking erect bristles.

**PHRYNOLYDELLA POLITA, new species.**

Length 5.5 to 9 mm. Numerous specimens of both sexes, Pinal Mountains, Chiricahua Mountains, Castle Butte, Arizona, Peloncillo Mountains, New Mexico, Sierra Madre, Chihuahua, 4,750 to 7,300 feet. (C. H. T. Townsend); and Williams, Arizona, Las Vegas Hot Springs, New Mexico. (H. S. Barber).

Shining black, thinly silvery pollinose. Face and front silvery, darker in varying lights; the inside of parafrontala very faintly and



almost imperceptibly brassy. Palpi fulvo-rufous. Four faint thoracic vittae, the inner ones narrow. Abdomen thinly silvery on forward half or so of last three segments, the pollen thickening basally. Tegulae white. Wings clear.

One of the females was labeled by Coquillett "*Masicera strigata* Wulp."

*Type*.—Cat. No. 22208, U.S.N.M.

#### AUSTROLYDELLA, new genus.

*Genotype*.—*Austrolydella assimilis*, new species.

Allied to *Stomatolydella*. Clypeus nearly twice as long as wide. Epistoma moderately warped. Facilia ciliate halfway. Proboscis little over half-head height; palpi thickened or widened at tip. Third antennal joint about two and one-half times second. Eyes thickly pilose in male, thinly so in female. Male front about one-fourth head width, equilateral throughout; female vertex not one-third head width. Ocellars moderately strong. Parafacialia as wide as facialia below in male, a little wider in female. Cheeks fully one-fifth eye length in both sexes. Three lateral scutellars, hind pair longest and more or less divaricate. A moderately long erect decussate apical pair of scutellars. Apical cell open some distance before tip. Tarsi short. Median marginal pair on first three abdominal segments; median discal pair on intermediate segments; and marginal and discal rows on anal segment; macrochaetae of normal length. Female with sharp piercer but without ventral carina or short spines. Otherwise mainly as in *Stomatolydella*.

#### AUSTROLYDELLA ASSIMILIS, new species.

Length, 6 to 6.25 mm. One male and one female, Santa Eulalia, Peru, 3,500 feet, April 28, 1914, on foliage (C. H. T. Townsend).

Blackish, silvery to golden pollinose. Male head and upper parts thinly silvery; female head and upper parts more thickly pollinose, distinctly golden, especially on front. Palpi subfulvous distally. Four blackish thoracic vittae. Pollen of abdomen more dense on basal half of last three segments; the posterior half of each segment and median vitta rather shining. Wings clear. Tegulae whitish.

*Type*.—Cat. No. 22222, U.S.N.M.

#### MEIGENIELLOIDES, new genus.

*Genotype*.—*Meigenielloides cinerea*, new species.

Clypeus gently sunken. Epistoma cut off, rim warped. Facialia bare. Proboscis very short; palpi stout and bowed. Third antennal joint about twice the elongate second, gradually widening to the subtruncate tip in female. Arista long, bare. Eyes bare. Female vertex not one-third head width. Three frontals below base of antennae. Two proclinate fronto-orbitals in female. Ocellars pres-

ent. Parafacialia bare. Cheeks fully one-third eye length. One preacrostichal; two postacrostichals; three sternopleurals, postintraalars, postsuturals and lateral scutellars; minute short hair-like apical scutellar pair. Third vein bristled only at base; others bare. Apical cell narrowly open well before tip. Hind crossvein a little nearer cubitus. Tarsi long. Median marginal pair on first two segments; median discal pair on intermediate segments; marginal row on last two segments; irregular discal row on anal segment.

**MEIGENIELLOIDES CINEREA, new species.**

Length, 7 mm. One female, Manzanares Creek, Pecos National Forest, New Mexico, 7,500 feet, August 30, 1916 (C. H. T. Townsend).

Slate-brownish, thickly cinereous pollinose over whole body. Palpi, basal half of antennae, and legs fulvous-yellowish; tarsi blackish. Four pale slate-colored thoracic vittae; a very faint median abdominal vitta of same color seen from directly above. Wings faintly yellowish along veins and costa. Tegulae glassy tawny-whitish.

*Type*.—Cat. No. 22226, U.S.N.M.

**PROROGLUTEA, new genus.**

*Genotype*.—*Proroglutea piligera*, new species.

Clypeus moderately sunken. Epistoma short, warped. Facialia bare. Proboscis short. Palpi stout, widened and flattened. Third antennal joint hardly three times second. Arista long and thin, bare. Eyes bare. Three frontals below base of antennae. Ocellars weak or vestigial. Parafacialia bare. Three sterno-pleurals, postintraalars, preacrostichals, postacrostichals, and lateral scutellars; four postsuturals; no apical scutellars. Third vein bristled only at base; others bare. Apical cell open a little before tip. Hind crossvein nearer to cubitus. Male abdomen stout-oval, pointed behind; ventrally the anal segment bears thick hair, meeting over the hypopygial slit. Median marginal pair on first two segments; median discal pair on intermediate segments; marginal row on last two segments; anal with short bristles on disk.

**PROROGLUTEA PILIGERA, new species.**

Length, 9.5 mm. Two males, San Carlos, Costa Rica (Schild and Burgdorf).

Brown, rather thickly brassy to pale golden pollinose. Palpi ulvous. Antennae blackish. Frontalia brown. Rest of head pale golden pollinose, as is thorax; four vittae and base of scutellum blackish. Abdomen golden pollinose on bases of last three segments, shading to silvery except on extreme base. Wings fuscous costally and along veins. Tegulae tawny.

*Type*.—Cat. No. 22252, U.S.N.M.

**MYOTHYRIOPSIS, new genus.**

*Genotype*.—*Myothyriopsis bivittata*, new species.

Clypeus shallow. Epistoma wide, not long, a little warped. Facialia bare. Proboscis hardly head height; palpi stout, bowed, widened at tip. Eyes bare. Frontals diverging one or two bristles below base of antennae. Third antennal joint three to four times second. Arista pubescent, basal joints short. No proclinate fronto-orbitals in male. Ocellars present. Parafacialia narrow, bare. Cheeks about one-fifth eye length. Four sternopleurals; three postintraalars, postsuturals, preacrostichals, postacrostichals and lateral scutellars. A moderately long decussate apical pair of scutellars. Third vein bristled halfway or so to small crossvein; other veins bare. Apical cell very narrowly open considerably before tip. Posterior crossvein nearly in middle between small crossvein and cubitus. First abdominal segment with a weak median marginal pair; second with a stronger median marginal pair; third and anal segments with marginal row. No sharp piercer in female.

**MYOTHYRIOPSIS BIVITTATA, new species.**

Length, 6 mm. Three females and two males, Chapada, Brazil (H. H. Smith).

Black, with golden pollen in stripes and fasciae. Head golden. Facial plate and facialia lead-gray, also at times the parafacialia; frontalia, two heavy thoracic vittae, and scutellum soft black. Antennae blackish. Palpi rufous or fulvous. Scutellum testaceous on tip. Abdomen shining black, slightly reddish on sides in male, the bases of last three segments broadly golden. Wings obliquely black costobasally from about middle of fifth vein to tip of third vein. Tegulae yellowish, the small scale white.

*Type*.—Cat. No. 22092, U.S.N.M.

*Sphalloglandulus* Townsend. This is the male of *Incamiya* Townsend. The genotypes are conspecific.

**Tribe MEIGENIINI.****TOPOMEIGENIA, new genus.**

*Genotype*.—*Topomeigenia matutina*, new species.

Clypeus moderately sunken. Epistoma elongate, considerably warped. Facialia ciliate about halfway. Proboscis short, palpi stout. Third antennal joint hardly three times second, narrow. Arista bare. Eyes nearly bare. Male vertex over one-fourth head width. Three frontals below base of antennae. Ocellars strong. Parafacialia bare, nearly equilateral, hardly half as wide as clypeus. Cheeks less than one-third eye length. Four sternopleurals, postsuturals, and lateral scutellars; three postintraalars, preacrostichals,

and postacrostichals; short erect decussate apical scutellar pair. Third vein bristled only at base, others bare. Apical cell open well before tip. Hind crossvein nearer to cubitus. Male claws long. No median marginals on first two segments; median row on last two. Hind tibiae ciliate, with a longer bristle.

TOPOMEIGENIA MATUTINA, new species.

Length, 8.5 mm. Two males, Topolobampo Bay, Sinaloa, Mexico, September 14, 1909, in company of numerous specimens buzzing loudly amongst foliage of shrubs near edge of bay before 6 o'clock in the morning (C. H. T. Townsend).

Antennae blackish, second joint tinged with rufous. Palpi fulvus. Frontalia brown. Rest of head dull silvery. Thorax and scutellum thickly dull silvery, more or less faintly brassy; with five blackish vittae, the middle one restricted to postscutum. Abdomen mostly rufous; basal half or more of last three segments pale brassy pollinose, the pollen thinning irregularly posteriorly on each segment; a dark median vitta present. Legs dark brown. Wings clear. Tegulae nearly white.

*Type*.—Cat. No. 22259, U.S.N.M.

PARAMEIGENIA, new genus.

*Genotype*.—*Paradexodes albifacies* Townsend 1908.<sup>1</sup>

Differs from *Paradexodes* as follows: Only two frontals below base of antennae in both sexes. Clypeus not longer than one and one-half times its width. No apical scutellar pair. Only two strong postacrostichals. Third antennal joint only twice second in both sexes. Arista thickened only at extreme base. Thorax no wider than abdomen.

OLLACHEA, new genus.

*Genotype*.—*Ollachea elongata*, new species.

Head characters of *Spylosia*, but epistoma warped. Parafacialia hairy on upper half. Cheeks nearly half eye length in female; less in male. Arista bare. Third antennal joint about twice the elongate second. Eyes bare. Ocellars present. Proboscis short; palpi clubbed. Three sternopleurals, postintraalers, preacrostichals, postacrostichals, and lateral scutellars; three or four postsuturals; only apical scutellar hairs; Third vein bristled only at base; others bare. Apical cell open a little before tip. Hind crossvein nearer to cubitus. Abdomen long, narrow, tapering to tip, flattened. Median marginal pair on first two segments; marginal row on last two; median discals on all segments but those of first and last segments vestigial in female; the median discals are doubled on intermediate segments

<sup>1</sup> Tax. Musc. Flies, p. 102.

and are stronger in the male, which, besides, has anal segment well covered with long erect bristles.

*OLLACHEA ELONGATA*, new species.

Length, 7 to 8 mm. Two males and one female, *Ollachea*, Peru, 9,500 feet, February 2, 1910, on flowers of *Buddleia* sp. (C. H. T. Townsend).

Blackish-brown, rather thickly brassy-cinereous pollinose. Palpi fulvous. Antennae black. Frontalia deep brown. Mesoscutum with two broad heavy blackish-brown vittae widened inwardly just behind suture, where they are more or less confluent; notched outwardly at suture, with an outer prong narrowly following suture behind, which is more distinct in the male. Scutellum brownish on disk, especially in the male. Abdomen with broad median vitta of brown, much widened on first segment, narrowly following hind borders of first three segments laterally. Wings nearly clear. Tegulae glassy, smoky-yellowish.

*Type*.—Cat. No. 22258, U.S.N.M.

*OPSOMEIGENIA*, new genus.

*Genotype*.—*Hypostena pusilla* Coquillett, 1895.<sup>1</sup>

General Meigeniine characters. Epistoma cut off short, not warped. Facialia bare. Eyes bare. One frontal below base of antennae, or at times two in male. Ocellars present. Parafacialia bare, moderately narrow, strongly narrowed below in female but less so in male. Two to three preacrostichals; three sternopleurals, postintraalars, postsuturals, postacrostichals, and lateral scutellars; no apical scutellars. Third vein bristled only at base; others bare. Apical cell narrowly open just before tip. Hind crossvein in middle. Male claws rather long. Median marginal pair on first two segments; median discal pair on intermediate segments in both sexes and on anal in female; marginal row on last two segments, discal row on anal in male.

*MACHAIROMASICERA*, new genus.

*Genotype*.—*Machairomasicera carinata*, new species.

Clypeus gently sunken. Epistoma short, scarcely warped. Facialia finely ciliate nearly halfway. Proboscis short; palpi stout. Third antennal joint over three times second in female. Arista long, bare. Eyes thinly pilose. Female vertex one-fourth head width. Two frontals below base of antennae. Two proclinate fronto-orbitals in female. Ocellars weak. Parafacialia narrow, bare. Cheeks about one-fifth eye length. Three sternopleurals, postintraalars, post-

<sup>1</sup> Journ. N. Y. Ent. Soc., vol. 3, p. 58; and in 1897 referred by its author to female of *Methypostema barbata* Coquillett, Rev. Tach., p. 62.

suturals, preacrostichals, post acrostichals and lateral scutellars; no apical scutellars. Third vein bristled over halfway to small crossvein, others bare. Apical cell open just before tip. Hind crossvein nearer to cubitus. Median marginal pair on first two segments, marginal row on last two. Female with sharp piercer and ventral carina, latter bearing very short spines on third segment only.

MACHAIROMASICERA CARINATA, new species.

Length, 7 mm. One female, below Manchi, Ecuador, 7,000 feet, November 22, 1910 (C. H. T. Townsend).

Head silvery, the sides of face and front golden. Palpi fulvous. Antennae blackish. Frontalia dark brown. Thorax and scutellum silvery, showing a slight brassy or ochreous tinge in places; leaving four black vittae and a short fifth median one behind suture. Abdomen subshining blackish, silvery pollinose on bases of intermediate segments and on basal half of anal; on venter and sides the pollen covers all except hind borders of segments. Legs blackish. Wings lightly smoky-yellowish on about costal half, the inner portion dilute or nearly clear. Tegulae pale fulvous.

*Type*.—Cat. No. 22247, U.S.N.M.

OCHROMEIGENIA, new genus.

*Genotype*.—*Ochremeigenia ormioides*, new species.

Clypeus deeply dished. Epistoma cut off at vibrissae, supplemented below by oral membrane. Facialia not ciliate half way. Proboscis about half head height, palpi stout. Third antennal joint two and one-half times second. Arista pubescent. Eyes bare. Frontals weak, stopping about base of antennae. No proclinate fronto-orbitals in male. Ocellars very weak. Parafacialia sparsely microsetose. Cheeks over one-fourth eye length. One preacrostichal and postacrostichal; two postintraalar and lateral scutellars; three sternopleurals and postsuturals; no apical scutellars, only bristly hairs. Third vein bristled over half way to small crossvein, others bare. Costal spine moderately long. Apical cell open just before tip. Hind crossvein about in middle. A weak median marginal pair on first segment and a strong one on second; strong marginal row on third and anal segments.

OCHROMEIGENIA ORMIOIDES, new species.

Length, 7 mm. One male, Mount Salak, Java, May 15, 1909 (Bryant and Palmer).

Pale fulvous to ochreous. Antennae pale rufous, fuscous at tip. Frontalia fuscous at anterior end, growing rufous posteriorly. Thoracic vittae obsolete. Abdomen increasingly rufous posteriorly. Tarsi pale, but appearing dark from the black vestiture. Wings nearly clear. Tegulae glassy-fulvous.

*Type*.—Cat. No. 22209, U.S.N.M.

**ZOSTEROMEIGENIA, new genus.**

*Genotype*.—*Zosteromeigenia mima*, new species.

Clypeus moderately sunken, epistoma elongate and in clypeal plane. Facialia bare. Proboscis short, palpi stout. Third antennal joint about three times second in male, narrow. Arista longer than antennae, long-pubescent about to tip. Eyes bare. Male vertex scarcely one-fourth head width. Three frontals below base of antennae. Ocellars present. Parafacialia bare, fully half as wide as clypeus, nearly equilateral. Cheeks fully one-fourth eye length. Three sternopleurals, postintraalar, postsuturals, presacro-stichals, postacrostichals, and lateral scutellars; no apical scutellars. Third vein bristled only at base, others bare. Apical cell very narrowly open some distance before tip. Hind crossvein nearer to cubitus. Male claws very long. Median marginal pair on first two segments, marginal row on last two.

**ZOSTEROMEIGENIA MIMA, new species.**

Length, 7.5 mm. One male Hamilton, Upper North Pine, Queensland, January, 1890 (Department Mines and Agriculture).

Colored almost like *Zosteromyia cingulata* Macqart, differing only as follows: Palpi fulvous. Abdomen broadly fulvous-yellow on sides from first segment to middle of third segment, the dark part of intermediate segments subtriangular. Wings narrowly brown on costa. Tegulae fuscous on outer basal portion.

*Type*.—Cat. No. 22239, U.S.N.M.

**Tribe EXORISTINI.****NEOSCOTIA, new name.**

*Genotype*.—*Tachina grandis* Zetterstedt.

This new generic name is proposed for *Scotia* Robineau-Desvoidy (not Huebner), 1863.<sup>1</sup>

**Tribe PHRYNCINI.****PHRYNOFRONTINA, new genus.**

*Genotype*.—*Phrynofrontina convexa*, new species.

Clypeus well sunken, long. Epistoma short, warped. Facialia bare, the facial profile strongly bulged. Proboscis hardly head height; palpi short and stout. Third antennal joint long, stout, five times second or more. Arista long, thin except at base, bare. Eyes bare. Male vertex nearly or quite one-third head width. Two frontals below base of antennae. Ocellars present. Two proclinate fronto-orbitals in male. Parafacialia bare, nearly equilateral, less than half as wide as clypeus. Cheeks fully one-third eye length.

<sup>1</sup> Dipt. Env. Paris, vol. 1, p. 255.

Three sternopleurals, postintraalar, postsuturals, preacrostichals, postacrostichals, and lateral scutellars; hairlike apical scutellar pair. Costal spine long. Third vein bristled only at base, others bare. Apical cell narrowly open considerably before tip. Hind crossvein about in middle. Male claws short; median marginal pair on first two segments; median discal pair on intermediate segments; marginal row on last two; discal row on anal.

**PHRYNOFRONTINA CONVEXA, new species.**

Length, 6 mm. Two males, Chain Bridge, Maryland, and Difficult Run, Virginia, September 12 and 14, 1913 (R. C. Shannon).

Head silvery pollinose, shading to light golden on front. Frontalia pale brownish. Palpi pale fulvous. Antennae black. Thorax and scutellum pale brassy pollinose; four vittae. Abdomen shining dark brown; basal half or so of last three segments silvery pollinose with pale golden shade in some lights. Legs blackish. Wings clear. Tegulae tawny-whitish.

*Type*.—Cat. No. 22261, U.S.N.M.

**EUTRITOCOAETA, new genus.**

*Genotype*.—*Eutritochaeta carpocapsae*, new species.

Differs from *Tritochaeta* as follows: Palpi much swollen or widened at tip. Third antennal joint four to five times second; longer in male. Arista thickened less than halfway. Two verticals in both sexes. Female frontalia as wide as one parafrontal; those of male a little less. Moderately long decussate apical scutellar pair. No costal spine. Male claws as long as last tarsal joint. Median marginal pair on first two segments; marginal row on last two; discal row and bristles on anal.

**EUTRITOCOAETA CARPOCAPSAE, new species.**

Length, 6.5 to 7 mm. One male and one female reared by F. L. Wellman, at Bentonville, Arkansas, from two puparia taken from a single codling moth cocoon collected under a tree band; issued July 13, 1918.

Blackish, silvery to cinereous pollinose. Palpi fulvous. Antennae blackish, base faintly tinged with fulvous. Frontalia brown. Rest of head silvery-ashy, shading to pale golden on front. Thorax, scutellum, and abdomen cinereous pollinose, with faint golden cast, leaving four thoracic vittae; first abdominal segment, median abdominal vitta, and irregular hind borders of last three segments blackish and subshining; the black hind borders of intermediate segments extending forward more or less in triangle on each side. Wings clear. Tegulae whitish.

*Type*.—Cat. No. 22243, U.S.N.M.



## Tribe ARGYROPHYLACINI.

## MINTHOHOUGHIA, new genus.

*Genotype*.—*Minthohoughia cylindrica*, new species.

Head like *Houghia*. Clypeus deep, short. Facialia bare. Arista short-pubescent. Eyes bare. Female vertex not one-third head width. One frontal below base of antennae. Ocellars weak, strongly divaricate, feebly proclinate, or even reclinate. Parafacialia bare, narrowed below to a point. Cheeks about one-twelfth eye length. Two sternopleurals, preacrostichals, and lateral scutellars; three postintraalar and postsuturals; postacrostichals present; rather long decussate apical scutellar pair. Wings very short. Costal spine strong. Third vein bristled to point about opposite hind crossvein; others bare. Apical cell narrowly open considerably before tip. Hind crossvein in middle. Abdomen like *Mintho* in form. No median marginals on first segment, but a pair on second; strong marginal row on last two segments.

## MINTHOHOUGHIA CYLINDRICA, new species.

Length, 5 to 6 mm. Two females, Lima, Peru, March 14, 1910, on foliage (C. H. T. Townsend).

Palpi very pale fulvous. Antennae blackish; second joint obscure rufous. Head and thorax thickly pollinose, with distinct golden-green tinge. Thoracic vittae scarcely perceptible. Abdomen shining rufous, bases of last three segments brassy-silvery; median vitta and last two segments shining blackish; the vitta broad and widening behind on second segment; the third segment broadly rufous on sides at base. Legs blackish. Wings nearly clear. Tegulae whitish.

*Type*.—Cat. No. 22256, U.S.N.M.

## CASAUIRIA, new genus.

*Genotype*.—*Casahuiria cornuta*, new species.

Clypeus broad, long, deeply sunken. Epistoma cut off, scarcely warped. Facialia strongly ciliate over half way. Proboscis about half head height, haustellum little longer than broad; palpi short, broad and flattened in male. Third antennal joint of male eight times second, wide. Arista bare. Eyes thinly short-hairy. Male vertex about one-fourth head width. Two or three frontals below base of antennae. Parafacialia very narrow, with some fine hairs above next frontals. Cheeks one-fifth eye length. Three each sternopleurals, postintraalar, postsuturals, preacrostichals, postacrostichals, and lateral scutellars; very weak apical scutellar pair. Third vein with one long bristle at base, others bare. Apical cell open a little before tip. Hind crossvein nearer to cubitus. Male

claws short. No median marginals on first segment; median marginal pair on intermediate segments; that on second short; marginal row on anal.

**CASAHUIRIA CORNUTA**, new species.

Length, 6.5 mm. One male, Casahuiri, Peru, 4,500 feet, February 4, 1910 (C. H. T. Townsend).

Dark brownish. Palpi and antennae blackish. Head thinly pale golden pollinose. Thorax and scutellum showing thin coat of ashy to ochreous pollen in oblique view, with four indistinct black vittae. Abdomen brown, with same thin pollen coat, the pollen showing densely on narrow bases of last three segments and widening on sides, leaving a narrow black median vitta. Wings infusate on basocostal half or so, diluted apically and on inner border. Tegulae smoky.

*Type*.—Cat. No. 22242, U.S.N.M.

Tribe **CARCELIINI**.

**GYMNOCARCELIA**, new genus.

The characters of this genus are indicated in the description of the species.

*Genotype*.—*Gymnocarcelia ricinorum*, new species.

**GYMNOCARCELIA RICINORUM**, new species.

This name is proposed for *Sturmia albifrons* Coquillett 1897.<sup>1</sup> The species is doubtfully the same as *Tachina albifrons* Walker 1856,<sup>2</sup> from the United States, which name in any event is preoccupied by *Tachina albifrons* Walker 1837,<sup>3</sup> from South America.

The genus is at once distinguished from all other Carceliini by the quite bare eyes. The type-specimens were reared by Mr. Max Kisliuk, jr., at Allapata, Florida, from *Apantesia phyllira* Drury found feeding on *Ricinus communis*. The species has been reared from various Arctians.

**EOCARCELIA**, new genus.

*Genotype*.—*Eocarcelia ceylanica*, new species.

Clypeus well sunken. Epistoma moderately short, a little warped. Facialia bare. Proboscis short, labella large. Palpi stout, bowed, widened. Third antennal joint about three times the rather long second. Arista long, slender, bare. Eyes thickly pilose. Male vertex rather over one-fifth head width. Three frontals below base of antennae. Ocellars strong. Parafacialia narrow, bare. Cheeks about one-eighth eye length. Two sternopleurals; three postintraalars, preacrostichals, postacrostichals, and lateral scutellars; four postsuturals; long decussate apical scutellar pair. Third vein

<sup>1</sup> Rev. Tach., p. 110.

<sup>2</sup> Trans. Linn. Soc. London, vol. 17, p. 351.

<sup>3</sup> Ins. Saund. Dipt., p. 283.

bristled only at base; others bare. Apical cell open considerably before tip. Hind crossvein nearer to cubitus. Male claws short. Hind tibiae pectinate, with longer bristle. Well-separated median marginal pair on first two segments; marginal row on third; marginal and two discal rows of weaker bristles on anal segment.

*EOCARCELIA CEYLANICA*, new species.

Length, 8.5 mm. One male, Peradeniya, Ceylon, May 29, 1914 (A. Rutherford).

Antennae blackish, articulation tinged with rufous. Palpi pale fulvous. Frontalia dark brown. Sides of front and face thinly silvery. Thorax and scutellum pale brassy pollinose; four thoracic vittae, the inner very narrow. Abdomen thickly brassy-silvery pollinose, leaving first segment and hind borders of last three blackish, also an indistinct median vitta. Legs blackish. Wings clear. Tegulae whitish.

*Type*.—Cat. No. 22260, U.S.N.M.

Tribe STURMIINI.

*NEOWINTHEMIA*, new genus.

*Genotype*.—*Neowinthemia abdominalis*, new species.

Allied to *Winthemia*. Facialia bare. Epistoma moderately short, scarcely warped, well narrowed from clypeus. Palpi heavy, bowed. Third antennal joint little over one and one-half times second. Eyes thickly pilose. Ocellars present. Parafacialia setose in three rows, narrowed considerably below. Cheeks about one-sixth eye length in male. Two sternopleurals; three postintraalar, preacrostichals, postacrostichals, and lateral scutellars; four postsuturals; short decussate apical scutellar pair. Male hind tibiae thickly ciliate, without longer bristle. Male claws long. No median marginals on first two segments, marginal row on last two, anal segment thickly bristly.

*NEOWINTHEMIA ABDOMINALIS*, new species.

Length, 9.75 mm. One male, Dixie Landing, Virginia, July 21, 1914, on foliage (C. H. T. Townsend).

Palpi deep rufous. Antennae blackish. Frontalia brown. Head silvery pollinose, with golden tinge especially on sides of front. Humeri and pleura thinly pollinose, mesoscutum shining brownish with faint pollen and scarcely visible vittae, scutellum testaceous. Abdomen blackish on first segment; the rest of tergum heavily silvery-cream pollinose, except a narrow black median vitta, which expands on second segment; sides of abdomen broadly rufous as seen from below. Legs blackish. Wings clear. Tegulae tawny.

*Type*.—Cat. No. 22254, U.S.N.M.

## SCHAUMIA DESVOIDYI, new name.

This name is proposed for *Tachina bimaculata* Robineau-Desvoidy (not Hartig) 1863.<sup>1</sup>

## Tribe CROCUTINI.

## XEOPROSOPA, new genus.

*Genotype*.—*Xeoprosopa uruhuasi*, new species.

Clypeus long, narrow, flush. Epistoma cut off, not warped. Facialia bare, half as wide as clypeus. Vibrissae inserted below middle of oral margin. Proboscis about one and one-half times head height; palpi long, moderately stout. Third antennal joint about four times second. Arista long, pubescent, second joint elongate. Eyes bare. Frontals weak, stopping at base of antennae. Two proclinate fronto-orbitals in male. Ocellars weak. Parafacialia bare, as wide as facialia. Cheeks one-fifth eye length. No preacrostichals; one postacrostichal; three sternopleurals, postintraalar, and postsuturals; two lateral scutellars; no apical scutellars, only hairs. First vein bristled to tip, third half way or more to small crossvein; others bare. Apical cell closed tightly in tip. Hind crossvein nearer to cubitus. Tarsi of male elongate. No median marginals on first two segments; median marginal pair on third; marginal row on anal segment.

## XEOPROSOPA URUHUASI, new species.

Length, 7 mm. One male, Uruhuasi, Peru, 6,500 feet, February 3, 1910, on flowers of *Baccharis* (C. H. T. Townsend).

Antennae black. Frontalia deep velvety blackish-brown. Facial plate, parafacialia, and parafrontalia burnished silvery-white, variable in changing lights. Palpi yellowish, tips dark. Mesonotum brown; the vittae nearly obsolete. Humeri and pleura silvery to ashy. Abdomen fulvous, becoming rufous on median line and posterior half, the tip of anal segment and fragmentary median line on third and anal segments blackish. Wings lightly yellowish-smoky, increasing costally. Tegulae pale yellowish.

*Type*.—Cat. No. 22214, U.S.N.M.

## CROCUTA LUTEA, new species.

Length, 4.5 mm. Two females, Franconia, New Hampshire, July 20 and 21, 1915 (C. H. T. Townsend).

Almost entirely pale yellow. Third antennal joint and arista strongly tinged with fuscous. Tarsi fuscous. Wings clear. One or two bristlets usually on first vein before tip. Third vein usually bristled a little beyond small crossvein. Tegulae tawny-whitish. Four postsuturals and postacrostichals.

*Type*.—Cat. No. 22266, U.S.N.M.

<sup>1</sup> Dipt. Env. Paris, vol. 2, p. 44.

## Tribe BIGONICHETINI.

## PACHYNOCERA, new genus.

*Genotype*.—*Pachynocera petiolata*, new species.

Clypeus moderately sunken. Epistoma cut off short, the edge bulged. Facialia bare. Proboscis little over half head height; palpi well widened. Third antennal joint of male five or six times second and swollen. Arista rather short, bare. Eyes bare. Front wide and short; male vertex fully one-third head width. Two frontals below base of antennae. Row of five to seven proclinate fronto-orbitals in male. Ocellars present. Parafacialia narrow, with row of six to eight strong facio-orbitals. Cheeks two-fifths eye length. Two lateral scutellars; three sternopleurals, postintraalar, postsuturals, preacrostichals, and postacrostichals; rather long decussate apical scutellar pair. First vein bristled about two-thirds way to tip; third vein bristled to point about opposite hind crossvein; fifth vein bare. Apical cell petiolate, the petiole longer than small crossvein to over twice same, ending considerably before tip. Hind crossvein in middle or nearer to small crossvein. Male claws and tarsi short. No median marginals on first segment, but a pair on second; marginal row on last two segments.

## PACHYNOCERA PETIOLATA, new species.

Length, 6 mm. Two males, Rio Charape, Jaen Province, Peru, 4,500 feet, September 12 and 13, 1911 (C. H. T. Townsend).

Shining black, with a faint metallic greenish tinge, more or less thinly silvery. Palpi fulvous. Antennae blackish, the base narrowly rufous. Frontalia brown. Face and sides of front rather thinly silvery, with blackish reflections in varying light. Thorax thinly silvery, more thickly so before suture and on pleura; with four indistinct black vittae, the inner and outer of each side approximated and without pollen between. Abdomen thinly silvery on basal half of anal segment and less than basal half of intermediate segments. Legs black. Wings fuscous on narrow costal border. Tegulae tawny-whitish.

*Type*.—Cat. No. 22248, U. S. N. M.

## XANTHOACTIA, new genus.

*Genotype*.—*Lasioneura palloris* Coquillett, 1895.<sup>1</sup>

Differs from *Gymnophthalma* as follows: First vein bristled only on about the distal third. Third vein bristled more or less fully nearly to tip. Fifth vein entirely bare. Apical cell open to nearly or quite closed, ending in tip. Weak appressed marginal row on first segment; nearly complete marginal row on second, of which middle pair

<sup>1</sup> Journ. N. Y. Ent. Soc., vol. 3, p. 50.

is erect; last two segments with erect marginal row, no discals on anal segment. Three sternopleurals, postintraalar, preacrostichals, postacrostichals and lateral scutellars; four postsuturals; short apical scutellar pair. The disk of scutellum shows a short pair and is evenly set with microchaetae surrounded by a conspicuously wide bare margin.

APHANTORHAPHA, new genus.

*Genotype*.—*Aphantorhapha arizonica*, new species.

Clypeus slightly depressed. Epistoma very short, slightly warped. Facialia bare. Haustellum three-fifths of head height; palpi small, widened at tip. Third antennal joint of male thick, about four times second. Arista short, thickened nearly to the sharp tip; second joint one-fourth as long as third. Eyes bare. Frontals in straight line, one below base of antennae. Two proclinate fronto-orbitals in male. Parafacialia very narrow, bare. Cheeks one-third eye length. Thoracic suture extinct throughout. Three sternopleurals, postintraalar, postsuturals, and lateral scutellars; preacrostichals and postacrostichals present; a microscopic nondescussate apical pair. Third vein bristled in about four bristles to small crossvein; others bare. Apical cell almost closed just before tip. Posterior crossvein straight, nearer to small crossvein. Last section of fifth vein over half as long as preceding section. No median marginals on first segment, but a pair on second; marginal row on third and anal segments.

APHANTORHAPHA ARIZONICA, new species.

Length, 3 mm. One male, Horseshoe Canyon, Chiricahua Mountains, Arizona, 6,000 feet, July 31, 1917, on flowers of *Ceanothus fendleri* Gray (C. H. T. Townsend).

Head very pale fulvous, thinly whitish pollinose. Frontalia fulvous. Antennae and arista black. Palpi pale yellowish. Thorax and abdomen brownish, thinly pollinose, rather shining. Pollen of mesonotum and abdomen with a brassy tinge, that of pleura less so. Median vitta and hind borders of abdominal segments brownish, shining. Legs brown or blackish. Wings clear. Tegulae tawny.

*Type*.—Cat. No. 22212, U.S.N.M.

TRICHOPTERYX, new genus.

*Genotype*.—*Trichopteryx tropica*, new species.

Clypeus gently sunken. Epistoma short, well warped. Facialia bare. Proboscis short and stout; palpi widened at tip. Third antennal joint three and one-half times second. Arista finely pubescent; second joint twice as long as wide. Eyes nearly bare. Frontals stopping at base of antennae. Two proclinate fronto-orbitals in male. Ocellars present. Parafacialia bare. Cheeks nearly one-

half eye length. Four postsuturals; three sternopleurals, postintraalars, preacrostichals, postacrostichals, and lateral scutellars; small nondecussate apical scutellar pair. First vein bristled to tip, third halfway to tip, fifth one-fourth way to hind crossvein. Apical cell narrowly open in tip. Hind crossvein a little nearer to small crossvein. No median marginals on first segment, but a pair on second; marginal row on third and anal segments.

TRICHOPTERYX TROPICA, new species.

Length, 6.5 mm. One male, Uruhuasi, Peru, 6,500 feet, February 3, 1910, on flowers of *Baccharis* (C. H. T. Townsend).

Head dull rufo-fulvous, thinly gray pollinose. Parafrontalia and antennae blackish; frontalia brown. Palpi rufous. Thorax and scutellum blackish, very thinly gray pollinose; humeri and pleura more thickly pollinose; four indistinct narrow thoracic vittae. Abdomen and hind femora fulvous-yellow; anal segment, greater part of third segment, and median vitta on second segment rufous to brown; darker posteriorly. Front and middle femora and tibiae and hind tibiae obscurely fulvous to rufous; tarsi blackish. Wings lightly smoky-yellowish; more so costally. Tegulae obscure fulvous.

*Type*.—Cat. No. 22211, U.S.N.M.

Tribe GERMARINI.

INCAMYIOPSIS, new genus.

*Genotype*.—*Incamyiopsis imitatrix*, new species.

Clypeus well sunken. Epistoma short, well warped. Facialia strongly ciliate two-thirds way. Proboscis about head height; palpi stout and clubbed. Third antennal joint of female about two and one-half times second. Arista thickened nearly to the sharply pointed tip; basal joints short. Eyes rather thickly pilose. Female vertex nearly one-half head width. Three frontals below base of antennae. Two proclinate and two reclinate fronto-orbitals in female; the hind one in each case divaricate. Ocellars strongly divaricate-proclinate. Parafacialia bare, fully half as wide as clypeus. Cheeks over half eye length. Two postintraalars, postsuturals, preacrostichals, and postacrostichals; three sternopleurals and lateral scutellars; microscopic apical pair of scutellars. Costal spine very strong. Third vein bristled only at base; others bare. Apical cell closed well before tip. Hind crossvein nearer to cubitus. No median marginals on first segment; median marginal and median discal pairs on second; marginal row and median discal pair on third; weak marginal and submarginal and stronger discal rows on anal segment.

INCAMYIOPSIS IMITATRIX, new species.

Length, 4.5 mm. One female, Oroya, Peru, 12,000 feet, March 6, 1913, on herbage (C. H. T. Townsend).

Imitates *Incamyia cuzcensis* in general coloration and especially in coloration and appearance of head, but has three heavy black thoracic vittae instead of two. Antennae and palpi black. Face and front silvery-white; the parafrontalia with a blackish maculation posteriorly and a fainter smaller one anteriorly in changing lights. Frontalia and three heavy wide thoracic vittae soft brown-black; middle vitta extending over whole scutellum. Four creamy-silvery vittae narrower than the black ones, shading to golden posteriorly, and pleura with two large subconfluent golden spots. Abdomen shining brown, rather thinly buff-gold pollinose on first two segments; the pollen more concentrated on base of second segment and thickly so on less than basal half of last two segments, the rest of which is without pollen. Wings nearly clear, yellowish costobasally. Tegulae buff-yellow.

*Type*.—Cat. No. 22221, U.S.N.M.

**METATACHINA, new genus.**

*Genotype*.—*Metatachina mellifrons*, new species.

Clypeus nearly flush. Epistoma very short, faintly warped. Facialia bare. Proboscis little over half head height; palpi long and stout. Third antennal joint over twice second in female. Arista long, bare. Eyes bare. Female vertex a little less than one-third head width. Three frontals below base of antennae. Two proclinate fronto-orbitals in female. Ocellars present. Parafacialia bare, about one-third width of clypeus below. Cheeks less than one-third eye length. Three sternopleurals, postintraalars, postsuturals, preacrostichals, postacrostichals, and lateral scutellars; short divaricate apical scutellar pair. Third vein bristled only at base; others bare. Hind crossvein nearer to cubitus. Median marginal pair on first two segments; median discal pair on intermediate segments; marginal row on last two segments; submarginal and discal irregular rows on anal.

**METATACHINA MELLIFRONS, new species.**

Length, 7 mm. One female, Sebago Lake, Maine, September 8, 1914, on foliage (C. H. T. Townsend).

Palpi straw-colored. Antennae blackish. Frontalia brown. Occiput silvery; rest of head light golden pollinose. Thorax and abdomen rather thickly silvery, with faint brassy tinge; four rather narrow black thoracic vittae; first abdominal segment and irregular hind borders of last three segments subshining dark brown, but first segment showing pollen in oblique view. Legs blackish. Wings clear. Tegulae whitish.

*Type*.—Cat. No. 22245, U.S.N.M.



## Tribe SALMACIINI.

## ARAVAIPA, new genus.

*Genotype*.—*Aravaipa atrophopoda*, new species.

Clypeus moderately sunken. Epistoma not very long, strongly warped. Facialia ciliate. Proboscis nearly head height; palpi slender. Antennae inserted on eye middle, the antennal axis only half head height. Third antennal joint three times the elongate second. Arista very short, erect, geniculate, thickened to sharp point; second joint half as long as third. Eyes bare. Three frontals below base of antennae. Two proclinate and six reclinate fronto-orbitals in female. Ocellars present, reclinate. Checks fully one-fourth eye length. Four sternopleurals and postsuturals; three postintraalar, preacrostichals, postacrostichals, and lateral scutellars; one short decussate apical scutellar pair. Third vein bristled nearly to small crossvein; others bare. Costal spine present. Apical cell petiolate ending far before tip; petiole twice as long as small crossvein. Cubitus over two-fifths of wing breadth from hind margin, without stump. Hind crossvein considerably nearer to cubitus. Median marginal pair on first two segments, marginal row on last two. Front metatarsi of female longer than following joints together. Female front tarsi plump, swollen, metatarsi subcompressed, claws minute.

## ARAVAIPA ATROPHOPODA, new species.

Length, 8 mm. One female, Rio Aravaipa, Arizona, 2,500 feet, August 29, 1917 (C. H. T. Townsend).

Black, silvery pollinose. Head silvery-white. Second antennal joint and base of third rufous. Palpi fulvous. Frontalia brown. Mesoscutum and scutellum rather thickly silvery, former with four nearly equal black vittae and with a golden-brown shade over the vittate portion. Front half or more of last three abdominal segments silvery-white, the rest shining black. Wings nearly clear. Tegulae white.

*Type*.—Cat. No. 22213, U.S.N.M.

## Tribe GYMNOCHETINI.

## CHARAPEMYIA, new genus.

*Genotype*.—*Charapemyia calida*, new species.

Clypeus flush. Epistoma very long, strongly warped in curve from clypeus. Facialia ciliate about one-third way. Haustellum fully half head height, palpi slender and elongate. Third antennal joint about four times second in male. Arista only microscopically pubescent. Eyes densely very long-pilose. Male vertex about one-sixth head width. Three frontals below base of antennae. No proclinate fronto-orbitals in male. Ocellars strong. Parafacialia bare. Checks

over one-third eye length in male. Two preacrostichals and lateral scutellars; three sternopleurals, postintraalars, postsuturals and post-acrostichals; long decussate apical pair of scutellars. Third vein bristled only at base; others bare. Apical cell open well before tip. Hind crossvein less than its length from cubitus. Male claws very long. No median marginals on first segment but a pair on second, median discal pair on intermediate segments, marginal row on last two segments, and discal row on anal.

**CHARAPEMYIA CALIDA**, new species.

Length, 7 mm. Two males, Rio Charape, Jaen Province, Peru, 3,700 feet, September 19, 1911 (C. H. T. Townsend).

Subshining blackish, thinly silvery pollinose. Head more thickly pollinose, with distinct golden tinge. Palpi fulvous. Third antennal joint largely rufous. Four indistinct blackish thoracic vittae. Abdominal pollen indistinctly spread but more dense basally on last three segments. Wings clear. Tegulae glassy-white.

*Type*.—Cat. No. 22223, U.S.N.M.

**CHRYSOTACHINA PERUVIANA**, new species.

Length, 8 to 9 mm. Seven males and seven females; 11 from Chosica, one each from Santa Eulalia, Lima, and Piura, Peru. (C. H. T. Townsend.)

Differs from Wiedemann's description of *reinwardtii* as follows: Antennae largely smoky-rufous; second joint distinctly metallic gold-green; third joint mostly brownish, twice as long as second in both sexes. Head golden-yellow pollinose in both sexes, the parafrontalia largely showing gold-green at least posteriorly. Frontalia light brown. Abdomen, scutellum, and thorax concolorous, usually gold-green, but at times with bluish or purplish cast.

*Type*.—Cat. No. 22275, U.S.N.M., from Chosica.

**NEOERIGONE**, new genus.

*Genotype*.—*Neorigone cinerea*, new species.

Clypeus flush. Epistoma wide, elongate, considerably warped. Facialia bare. Proboscis about head height; palpi heavy, widened in male, much swollen in female. Third antennal joint about two and one-half times second. Arista nearly bare; basal joints short. Eyes pilose. Frontals two to three below base of antennae. No proclinate fronto-orbitals in male. Ocellars present. Parafacialia bare. Cheeks about one-third eye length. Two sternopleurals; three postintraalars, postsuturals, preacrostichals, postacrostichals and lateral scutellars. A weak decussate apical pair of scutellars. Third vein bristled over halfway to small crossvein; other veins bare. Apical cell open well before tip. Posterior crossvein nearer to cubitus. No

median marginals on first abdominal segment; a medium marginal pair on second; marginal row on third and anal; a median discal pair on second and third; a discal row on anal.

NEOERIGONE CINEREA, new species.

Length, 9 mm. One male and two females, Chapada, Brazil (H. H. Smith).

Blackish, cinereous pollinose. Head silvery, parafrontalia tinged with golden; frontalia brownish. Antennae largely rufous. Palpi fulvous. Four dark thoracic vittae. Changeable blackish spots on abdomen from hind margin of second segment posteriorly; viewed from above there are four such spots on hind margin of second and third segments, and two on front margin of third and anal segments. Wings nearly clear. Tegulae white.

*Paratype*.—Cat. No. 22091, U.S.N.M.

Type in American Museum of National History.

Tribe LINNAEMYINI.

COPECRYPTA ANDINA, new species.

Length, 6 to 7.5 mm. Many specimens of both sexes, Verrugas Canyon, Peru, 5,500 feet, June 25 to July 23, 1913, on flowers of *Telanthera* (C. H. T. Townsend).

Differs from *ruficauda* Wulp by the sides of abdomen being rufous to fulvous, quite distinctly so in female and very broadly and conspicuously so in male. Legs fulvous; only the tarsi black.

*Type*.—Cat. No. 22276, U.S.N.M.

Tribe CHIRICAHUINI.

BEZZIMYIA, new genus.

*Genotype*.—*Bezzimyia busckii*, new species.

General characters of *Chiricahuia*, differing principally as follows Ptilinal suture ending in the cheek grooves, not reaching lateral oral margin. Parafacialia narrow, narrowed below, with only a row of fine closely placed bristlets on upper part. Facialia bristly about halfway up. Male third antennal joint swollen, nearly six times the very short second. Male vertex about one-fifth head width. Antennae inserted slightly below eye middle, the front rather long. Arista inserted at extreme base of third antennal joint. Frontals stopping at base of antennae. Frontalia very narrow. Vertical bristles very short, but the outer is proclinate. Ocellars present, but very small and short, as are the frontals. Checks about half eye length. Third vein not bristled. Apical crossvein absent. Hind crossvein extremely close to small crossvein, only a little out of line with it. The abdomen is without true macrochaetae. Tibiae and

tarsal joints thickened, not elongate. Male claws short. Thoracic chaetotaxy very similar, but all the bristles much reduced in size.

**BEZZIMYIA BUSCKII**, new species.

Length, 5 mm. One male, Trinidad Rio, Panama, February 17, 1912 (A. Busck).

Dusky brownish, faintly pollinose. Palpi small, short, fulvous. Third antennal joint and arista clear orange, the basal joints obscurely so. Frontalia brown. Rest of head very faintly silvery, as is the thorax; latter shows indistinctly two heavy brown vittae. Scutellum and abdomen brown, without distinct pollen. Legs brown, femora more or less rufous. Wings slightly fuscous, with a clear streak near costa on basal two-thirds. Tegulae small, glassy-whitish or faintly tinged.

*Type*.—Cat. No. 22263, U.S.N.M.

Tribe **CUTEREBRINI**.

**ATRYPODERMA**, new genus.

*Genotype*.—*Musca americana* Fabricius; equals *Trypoderma americana* Wiedemann.

Differs from *Cuterebra* (type, *cuniculi* Clark) as follows: Mesoscutum at most scarcely as long as wide. Abdomen no wider than thorax. Front not prominently produced, the front border of head viewed from above subarcuate. Antennal axis little over half head height. Whole outline of head and body viewed from above equilateral and subquadrangular.

*Cuterebra* has the mesoscutum fully as long as wide; the abdomen very conspicuously wider than thorax; the front strongly produced, the head viewed from above being subtriangular; the antennal axis nearly two-thirds head height; the outline of head and body viewed from above strongly contrasted with that of *Atrypoderma* and quite *Bombus*-like. *Cuterebra maculosa* Knab, described from Panama, belongs in *Cuterebra*.